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TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1907.

Nos. 110 and 111.

WHITE-SMITH MUSIC PUBLISHING COMPANY, APPELLANT,

vs.

APOLLO COMPANY.

APPEALS FROM THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SECOND CIRCUIT.

FILED SEPTEMBER 20, 1906.

(20,382 and 20,383.)

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a United States Circuit Court of Appeals for the Second Circuit.

THE WHITE-SMITH MUSIC PUBLISHING COMPANY, Complainant-Appellant,
vs.
THE APOLLO COMPANY, Defendant-Appellee.

(2 Causes, 8126-8127.)

Transcript of Record.

Appeals from the Circuit Court of the United States for the Southern District of New York.

Printed under the Direction of the Clerk.

1 Circuit Court of the United States for the Southern District of New York. In Equity.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

To the Honorable the Judges of the Circuit Court of the United States for the Southern District of New York:

White-Smith Music Publishing Company, a corporation duly organized and existing under the laws of the Commonwealth of Massachusetts, and having its principal place of business at the City of Boston, in said Commonwealth of Massachusetts, brings this its bill of complaint against Apollo Company, a corporation organized and existing under the laws of the State of New Jersey, and having a place of business in the Borough of Manhattan, in the County and State of New York, in said District; and thereupon your orator complains and says:

1. That Adam Geibel, being a citizen of the United States, on or before the first day of May, 1897, was the author of a certain unpublished musical composition, to wit, "Little Cotton Dolly."

2. That the said Adam Geibel, on or about the 2nd day of May, 1897, assigned, transferred and sold to your orator all his
2 right, title and interest in and to said musical composition and in and to the copyright obtainable therefor.

3. That before the publication of the aforesaid musical composition in this or any foreign country, to wit, on the 15th day of May, 1897, your orator deposited within the mail within the United States, addressed to the Librarian of Congress, at Washington, District of Columbia, a printed copy of the title of the said musical composition, and likewise two copies of the said musical composition, and also the sum of fifty cents for recording the title of said musical composition; and that the said Librarian of Congress duly received the afore-

said sum of money and duly recorded the title aforesaid on the 17th day of May, 1897; and that the aforesaid printed copy of the title and the aforesaid two copies of the said musical composition were delivered at the office of the Librarian of Congress at Washington, District of Columbia, on the 17th day of May, 1897; that by reason of the premises and of the statutes in such case made and provided there were secured to your orator, its legal representatives and assigns, or intended so to be, for the term of twenty-eight years from the 17th day of May, 1897, the sole liberty of printing, reprinting, publishing, completing, copying, executing, finishing and vending the said musical composition, and likewise the exclusive right to dramatize or translate the same.

4. That the first publication of said musical composition in this or any foreign country was made by your orator on the 17th day of May, 1897, at said City of Boston, and that since that time the said musical composition has continued to be so published by your orator.

5. That upon every copy of the said musical composition published by your orator there has been inscribed upon some
3 visible portion thereof the copyright notice required by law in the words following: "Copyright 1897 by White-Smith Music Pub. Co."

6. That the said copyrighted musical composition, being the subject matter of this litigation, is of great value, and that it exceeds in value the sum of five thousand dollars.

7. That the defendant, well knowing the premises and the rights secured to your orator as aforesaid, but contriving to injure your orator and to deprive it of the benefits and advantages which might and otherwise would accrue unto it, on or about the 1st day of January, 1902, and since, and without the consent of your orator, and against the will of your orator, and in violation of your orator's rights, and in infringement of said copyright, did, as your orator is informed and believes, at the City of New York, in the County and State of New York, and at other places within the United States, publish and sell great numbers of copies of said musical composition, the property of your orator, and for which your orator has obtained said copyright as aforesaid, and that the defendant still continues so to do, and that it is threatening to publish and sell copies of the aforesaid musical composition in large quantities, and to supply the market therewith.

8. That your orator cannot with certainty state the exact amount of profits by the defendant aforesaid sought to be diverted to itself, but believes the same to be the full sum of five thousand dollars and so charges the fact to be, and prays that said defendant may full and true disclosures make as to the same and may be decreed to account therefor in full.

9. To the end, therefore, that your orator may obtain re-
4 lief in the premises in this Honorable Court, and because it is without remedy elsewhere, it humbly prays:

I. That the said Apollo Company may be made defendant to this bill and compelled to answer each and every allegation therein con-

tained as fully as if directly interrogated as to each (but not under oath, an answer under oath being waived).

II. And your orator prays your Honors to grant unto your orator a writ of injunction under the seal of this Honorable Court, directed to said Apollo Company, and its agents and servants, enjoining it and them and each of them, from copying, publishing, selling or offering for sale your orator's said copyrighted musical composition, or any colorable imitation thereof, and that they may be likewise so enjoined, pending the determination of this suit.

III. That the said Apollo Company, by the decree of this Court, may be compelled to account for and pay over to your orator all the profits which the defendant has derived or shall have derived from any copying, publishing, selling or offering for sale of the said musical composition as aforesaid, and also to pay the costs of this suit, and for such other and further relief as the equity of the case or the Statutes of the United States may require and to this Court may seem just.

IV. And, further, to the end that equity may be done and that the relief herein prayed for, and all other relief that it may be righteous in the premises to administer, may be afforded your orator, may it please your Honors such relief fully to grant and to award against the said Apollo Company a writ of subpœna of the United States, commanding it, on a day certain to be named and under a certain penalty, to be and appear in this Honorable Court, then and there to answer all and singular the premises, and to stand to, perform and abide such further order, direction and decree as may be made against it.

And your orator, as in duty bound, will ever pray, &c.

DICKERSON, BROWN & RAEGENER,
Sol's for Complainant.

EDWIN H. BROWN,
LOUIS C. RAEGENER,
ALEX. P. BROWNE,
Of Counsel.

STATE OF MASSACHUSETTS, *County of Suffolk, City of Boston, ss:*

Daniel L. White, being duly sworn, deposes and says, that he is the president of the White-Smith Music Publishing Company; that he has read the foregoing bill of complaint by him subscribed on behalf of the complainant, and that he knows the contents thereof to be true of his own knowledge, except as to the matters therein stated to be alleged upon information and belief, and as to those matters, he believes it to be true.

DANIEL L. WHITE.

Sworn to before me this 29th day of May, 1902.
[L. S.] EDWARD C. BOURNE,
Notary Public.

[Endorsed:] "Filed June 2, 1902."

Replication in usual form filed September 1, 1902.

6 Circuit Court of the United States, Southern District of New York. In Equity.

No. 8126.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

"Little Cotton Dolly."

Testimony taken pursuant to notice before George Lemist Clarke, Esq., Notary Public, at the office of Alexander P. Browne, Esq., 31 State Street, Boston, Mass., on Friday, October 10, 1902, at 11 a. m.

Present: Alex. P. Browne, Esq., and S. L. Moody, Esq., of Counsel for Complainant.
Paul Wilcox, Esq., of Counsel for Defendant.

Complainant's counsel offers in evidence certified copy of the charter of the White-Smith Music Publishing Company, and the same is marked "Complainant's Exhibit No. 1." It is consented that a copy of the same may be used with the same force and effect as the original, which will be produced, if desired.

Deposition of Walter M. Bacon.

Direct examination by Mr. MOODY:

WALTER M. BACON, being duly sworn as witness for complainant, testifies as follows:

7 Q. 1. Please state your name, age, residence and occupation?

A. Walter M. Bacon; age, 48; residence, Boston, Mass.; occupation, treasurer of the White-Smith Music Publishing Company.

Q. 2. For how long have you been connected with the White-Smith Music Publishing Company?

A. I have been connected with the White-Smith Music Publishing Company as a corporation and a firm for sixteen years.

Q. 3. What was the firm White-Smith Music Publishing Company? Who were the members?

A. Daniel L. White, doing business under the name and style of the White-Smith Music Publishing Company.

Q. 4. That has been the case ever since you were connected with them?

A. No; he and his father were associated together, but his father died in 1892, and Daniel L. White succeeded to the whole business after his father's death and continued as proprietor until April 16, 1897, when the concern became a corporation.

Q. 5. Are you familiar with the handwriting of Daniel L. White?
A. I am.
Q. 6. Have you seen him write frequently?
A. I have.
Q. 7. Would you know his signature if you saw it?
A. Yes.
Q. 8. I show you a paper purporting to be a bill of sale from Daniel L. White of Boston to the corporation, the White-Smith Music Publishing Company, of all machinery, tools, etc., music plates and copyrights, etc., belonging to the firm of the White-Smith Music Publishing Company, and ask you if you recognize the signature at the end thereof?

A. I do.

8 Q. 9. Whose signature is it?

A. Daniel L. White's. I saw him write the signature.

The bill of sale is offered in evidence and marked "Complainant's Exhibit No. 2." It is consented that a copy of the same may be used with the same force and effect as the original thereof, the original to be produced if required.

Q. 10. I show you a paper purporting to be an agreement made June 18, 1897, between the White-Smith Music Publishing Company, Adam Geibel and Richard Henry Buck, of Philadelphia, and ask you if you know the first signature at the bottom thereof?
A. That is the signature of Daniel L. White, president of the White-Smith Music Publishing Company.

Said agreement is offered in evidence for identification and mraked "Complainant's Exhibit No. 3."

Q. 11. What are your duties as treasurer of the White-Smith Music Publishing Company?
A. I have general charge of the finances and general supervision of the carrying on of the business, particularly as relates to the finance and sales department; the commercial end of the business, you might style it.
Q. 12. Who has to do with the obtaining of copyrights for the White-Smith Music Publishing Company?
A. Mr. Banks M. Davison, manager of publications, has charge of that part of the business, except as to the care of the papers. Those are placed in my custody and examined by me from time to time, to see that they are correct.

9 Q. 13. I show you a draft on the Boylston National Bank to the Librarian of Congress, dated May 15, 1897, for one dollar in payment of fees for recording "Little Cotton Dolly, Plantation Lullaby, A. Geibel," and "Coon Superstition, Song, C. E. Trevathan." Do you know the signature to that paper?
A. That is the signature of Mr. White, president of the White-Smith Music Publishing Company.

The paper is offered in evidence, together with the endorsements and stamps thereon, and marked "Complainant's Exhibit No. 4."
Complainant's counsel offers in evidence a copy of the printed

musical publication issued by the complainant, the White-Smith Music Publishing Company, entitled "Little Cotton Dolly, Plantation Lullaby, by Adam Geibel," and the same is marked "Complainant's Exhibit No. 5."

Q. 14. This Exhibit No. 5 just offered is one of the regular publications of the complainant. I note that this is marked with the words "Copyright, 1897, by the White-Smith Music Publishing Company." Can you state whether all the copies published and printed by the complainant are so marked?

A. So far as I know they are. That is a matter that comes under the immediate supervision of Mr. Davison, the manager of publications.

Q. 15. Can you state approximately how many copies of this composition have been sold by the complainant since it was copyrighted by it?

A. I can estimate approximately that the sales of the copyrighted "Little Cotton Dolly," as a song, and other arrangements of it, are in the vicinity of some twenty thousand.

Q. 16. Do you know whether this composition still has an active sale?

10 A. It has.

Q. 17. Are you able to state anything as to the value of the copyright of this composition to the White-Smith Music Publishing Company? If so, please do so, and give reasons for any opinion that you may express?

A. Under our agreement with Geibel we have the right to publish this piece for the unexpired original copyright term, as well as rights in the renewal, making a period of some thirty-seven years, and from the fact that the song has met with a large sale thus far, and that it is being sold well today, and is of a high standard for that class of composition, I fully believe that it is worth at least five thousand dollars. In addition to the reasons before stated, the composer of the song, Mr. Geibel, is considered a man of high caliber as a music composer, both in America and in England, and his name alone in connection with any musical composition lends great value to it, that is, as a composer. Our company handles popular pieces differently from a large number of publishers, inasmuch as they do not break the market price and glut the music stores with cheap publications; that is, if we have a composition that sells, we maintain the price, and find that it results in not glutting the market and using up the song before its copyright term has expired, by cheapening it. The result is that our copyrights prove valuable for many years after first publication.

Q. 18. Have you found this to be the rule with compositions possessing intrinsic merit, and which have met with the favor of the public, that their popularity, under the business methods pursued by the complainant, has continued for a long term?

A. Almost invariably. We have a large number of copyrights in our catalogue which have been published for many years, which today are selling just as well, if not better, than when they were first published.

11 Q. 19. Referring to your statements that about twenty thousand copies of this song and its various arrangements have been already sold by the complainant, can you state approximately what the value of the copyright has so far been? That is, what has been the profit, or the difference between the selling price and the cost of production of these twenty thousand copies, approximately?

A. In the vicinity of two thousand dollars, if not more.

Q. 20. You have referred to different arrangements of this song. What do you mean by that?

A. The melody of the song has been arranged as a quartette, to be sung by male voices and other voices. I do not know how many arrangements there are of that kind. It has been arranged for banjo, mandolin and piano.

Cross-examination by Mr. WILCOX:

X Q. 21. How do you reach the figures of twenty thousand copies of arrangements sold by your corporation?

A. By estimate based on my remembrance of the royalty accounts rendered to Mr. Geibel under his agreement, and by consultation with the superintendent of our printing department, as to the various arrangements that have been printed.

X Q. 22. You base your estimate entirely upon your remembrance and conversations had with your manager of the printing department?

A. Yes, sir.

X Q. 23. Do your books show these figures anywhere?

A. Our books would show the statements of royalty made to Mr. Geibel. The royalties which were paid would show the number of copies sold on which we paid royalty. Certain arrangements of the song, such as quartettes, we do not pay royalty on. Whether
12 our printing department would show the number of copies printed I am not prepared to state.

X Q. 24. Can you produce your books Mr. Bacon, to show from the time your corporation purchased these copyrights, the amount of royalties paid to Mr. Geibel?

A. If counsel does not object, gladly.

Counsel for complainant states that the books will be produced at two o'clock, and cross-examination on this line is suspended until that time.

X Q. 25. Is the "Little Cotton Dolly," what is known in music as a popular piece?

A. A popular composition of the better grade.

X Q. 26. Is it not a fact that pieces known as those having popularity have, as a rule, a short life?

A. Not of the class of compositions like these.

X Q. 27. Do you consider the composition "Little Cotton Dolly" a composition of a higher grade than a popular composition?

A. I consider it of a higher grade than the popular composition

known as the coon song. In fact, not in the same class as what is known as the coon song.

X Q. 28. Then you consider that a composition such as "Little Cotton Dolly" would have a substantial value during the whole of its life as a copyright composition?

A. I do, on account of the name of the composer being associated with it. Mr. Adam Geibel is a musician of high repute, being prominently identified with many successes; he is also a teacher of music in the public schools of Philadelphia.

X Q. 29. State your reasons for thinking Mr. Geibel to be a composer of considerable reputation?

A. I know that Mr. Geibel is a composer who is sought
13 after by all the leading publishers of the country and of England, as a man desirable to be a contributor to their catalogues on account of the popularity of his compositions.

X Q. 30. Have you known other publishers than yourselves to seek after his compositions in this country? If so, state the names of some?

A. The opinion I have in regard to the question you ask I have obtained from Mr. Davison, the manager of publications of our company.

Counsel for defendant moves to strike out the answer as being irresponsive and secondary evidence.

A. I might also state that I know by reason of coming in contact with other publishers how Mr. Geibel is regarded by them. In other words, it is general trade knowledge that Mr. Geibel is a desirable man to be a contributor to a publisher's catalogue.

Same objection.

X Q. 31. You do not know the names of any publishers other than yourselves who have sought the publications of Mr. Geibel?

A. Not of my own knowledge.

X Q. 32. How do you know of your own knowledge that this copyrighted song, "The Little Cotton Dolly," still has an active sale?

A. By seeing the orders that come in to us from the purchasing people.

X Q. 33. Can you produce those orders?

A. I can produce those orders, but it would be a weeks' work to do so. The royalty accounts as shown on our books are the basis of our estimate.

X Q. 34. Have you personally looked over these book accounts before giving your testimony in this suit?

A. The royalty accounts I have looked over in a general way.

14 X Q. 35. While considering the reputation of Mr. Geibel I omitted to ask you how you knew that he had a reputation as a good composer in England?

A. I have just returned from England and visited the trade there and know how he is regarded among the trade.

X Q. 36. Did you discuss Mr. Geibel's reputation with any music publishers in England?

A. I did; with the firm of Charles Sheard & Co., of London, and J. Curwen & Son, Limited, of London.

X Q. 37. As far as the "Little Cotton Dolly" is concerned, what is the nature of the royalty that you pay to Mr. Adam Geibel? Upon what compositions?

A. We pay a royalty on the song, the schottische, the mandolin and guitar arrangement, the mandolin and piano arrangement, and the banjo arrangement. We do not pay a royalty on the quartette arrangements.

X Q. 38. Have you taken out a separate copyright upon the quartette arrangements?

A. We copyright every arrangement as issued.

X Q. 39. Then you have taken out a copyright on the quartette arrangements?

A. As a matter of precaution we have.

X Q. 40. State how you arrive at the conclusion that your profits on the song "Little Cotton Dolly" have amounted to two thousand dollars up to the present time?

A. In figuring the value of two thousand dollars, I estimate that ten thousand copies of the quartette arrangement were sold at a profit of six cents per copy, and ten thousand of the other arrangements at fifteen cents a copy, which mentally figured would amount to about two thousand dollars.

X Q. 41. Do you know of your own knowledge that ten thousand copies of the quartette have been sold?

A. I do not.

X Q. 42. Do you know of your own knowledge that ten thousand copies of the other arrangements have been sold?

A. I do not.

X Q. 43. Are the profits that you have just spoken of gross or net profits?

A. Gross profits. Royalties are not deducted.

X Q. 44. Then I understand that in stating that the profits have been two thousand dollars, you have not deducted the royalties paid to Mr. Geibel. Am I correct?

A. You are correct.

OCTOBER 10, 1902—2:30 p. m.

Examination resumed.

X Q. 45. Do you know of your own positive knowledge that royalties were paid to Adam Geibel on 7,739 copies of a piece of music called "Little Cotton Dolly," in the form of a song, a schottische, mandolin and guitar, mandolin and piano, and banjo?

A. I do.

X Q. 46. How much per copy?

A. On the song three cents per copy, on the schottische four cents, mandolin and guitar three cents, mandolin and piano four cents, banjo three and a half cents.

X Q. 47. How much do you receive for the song?

A. Sixteen and two-thirds cents is the average price received per copy. That is the least wholesale price. Frequently we receive more. The average price is sixteen and two-thirds cents.

X Q. 48. You have received sixteen and two-thirds cents
16 per copy from the sales of the song. How much have you received from the sale of the schottische?

A. Sixteen and two-thirds cents, the same as for the other arrangements.

X Q. 49. The arrangement marked for identification states that you are to pay three cents a copy for the song, and you have sworn that you have paid four cents for some arrangements. Why this difference? Is there another contract with Geibel?

A. Under a general understanding Mr. Geibel gets ten per cent. of the retail price of every arrangement other than the song.

X Q. 50. This law suit applies only to the song, does it not?

Objected to as calling for a conclusion of law.

Question withdrawn.

X Q. 51. What does this law suit apply to?

A. Infringement on our copyrighted musical compositions "Little Cotton Dolly."

X Q. 52. Did you copyright "Little Cotton Dolly" as a song or as a musical composition?

Objected to as the papers in evidence speak for themselves.

A. We copyrighted it as a musical composition.

X Q 53. You have stated that in computing the profits on this composition "Little Cotton Dolly" you have not included the royalties paid to Geibel? Have you included any other item of expense?

A. I have included everything except the royalties.

X Q. 54. Do you usually include royalties when figuring expense items on musical compositions?

17 Question objected to inasmuch as the witness on direct-examination was expressly asked to give the value of the copyright and not the net profit made by the complainant upon the sale of the copyrighted article.

X Q. 55. How do you arrive at the figures you have given in the question of the cost of "Little Cotton Dolly?"

A. I have heretofore testified that I estimated the total sales of "Little Cotton Dolly" at twenty thousand copies, ten thousand of which were the song and other arrangements except quartettes. On these I figure a profit of fifteen cents per copy. On the quartettes I figure a profit of six cents per copy.

X Q. 56. How do you figure a profit of six cents a copy on the quartettes?

A. The quartettes net us on the average from seven to eight cents a copy. I figure an average profit of six cents a copy by subtracting a cost of from one to two cents per copy for printing and paper.

X Q. 57. How do you get at the figures of from one to two cents for paper and printing per copy?

A. From my general knowledge of the publishing and printing business.

X Q. 58. Do you charge up any other item of expense against cost other than paper and printing?

A. Not as a general thing on a musical composition which has the large sales that the "Little Cotton Dolly" has had. Had it a smaller sale I should take into consideration the fact of the cost of the plates. These plates for a quartette will cost about two dollars, which never afterwards has to be taken into consideration, as the plates will last forever, as we do not print directly from them.

X Q. 59. Do you ever charge up items of interest, depre-
18 ciation in plant, rent, and insurance, against the item of profit?

A. Not in figuring profits on any one piece.

X Q. 60. You have answered that you assume that there have been ten thousand copies of the "Little Cotton Dolly" sold of other arrangements than the quartette at a profit to you of fifteen cents per copy. How do you arrive at the item of fifteen cents per copy as a profit?

A. I think I have already explained at least twice in the course of my examination that the lowest average wholesale price received for the song and other arrangements is sixteen and two-third cents per copy. I arrive at the profits in the same manner as I have stated heretofore. Since my testimony this morning I have learned that there were not more than seventy-eight hundred copies in round numbers instead of ten thousand of the song and other arrangements, except in the quartette.

X Q. 61. Do you know of your own knowledge how many copies of the quartette have been sold?

A. I do not.

Redirect examination by Mr. MOODY:

R. D. Q. 62. Please state what your acquaintance is with the music-publishing trade in this country and abroad, and what means you have for knowing the repute and popularity of Mr. Geibel as a composer?

A. Being a prominent officer of the Music Publishers' Association of the United States, viz., chairman of the executive committee, I have an extensive and thorough acquaintance with all the publishers of the United States, and with a large number of English, French and other publishers, having recently returned from a trip to England and France partially in the interest of the association. This enables me through my acquaintance to express the opinions which I have expressed.

19 R. D. Q. 63. Your opinion, then, that Mr. Geibel is a composer of great repute, and that his compositions are much sought after and considered valuable in the music-publishing trade, is based upon your acquaintance with music publishers here and abroad and the conversations you have had with them upon musical matters from time to time?

A. It is.

Recross-examination by Mr. WILCOX:

R. X Q. 64. When did you buy your last piece of music from Adam Geibel?

A. I cannot testify as to that of my own knowledge. We are buying them right along. I will add that Mr. Geibel is under contract with us for a term of years for all of his compositions of a certain class.

WALTER M. BACON.

BOSTON, *October* 10, 1902.

Deposition of Banks M. Davison.

BANKS M. DAVISON, of lawful age, a witness called on behalf of complainant, being duly sworn, deposes and says:

Direct examination by Mr. MOODY:

Q. 1. Please state your name, age, residence and occupation?

A. Banks M. Davison; age forty-three; Newton, Mass.; occupation, musician and manager of publications of the White-Smith Music Publishing Company.

Q. 2. How long have you been connected with the complainant and its predecessors?

A. About twenty years.

Q. 3. How long have you been manager of publications for the complainant and its predecessors?

20 A. For the last ten years.

Q. 4. Please state generally what your duties are as such manager?

A. I have charge of buying manuscripts and seeing that they are engraved and copyrighted when they are ready for publication. In fact, as the manager of publications for our firm, I follow the manuscript from the time it is submitted to the time of its publication.

Q. 5. Do I understand that you examine the manuscript to see whether it is desirable for purchase?

A. Yes, sir.

Q. 6. What do you have to do, if anything, with the copyright of musical compositions acquired by the complainant?

A. When the composition is printed ready for publication, I take the necessary copies, the two copies and title, from what we call our publication counter. I take these two copies and title in to the lady clerk who does the clerical work of copyrighting, and instruct her with regard to the copyrighting of the piece, and whether it is to be simply a domestic copyright or international. If it is a domestic copyright, I instruct her that it is so, and that this being the day of publication, of course it is the day for her to attend to the matter, which she does under my instructions. If it is an international copyright, the procedure is practically the same, with the exception that the copies and title necessary for the entrance of copyright, she is instructed to send to Washington two days before the date agreed

upon for publication in both countries. That is so that she can instruct the Librarian to make the date agree on both papers, and to give it time to get there.

Q. 7. Do I understand that this young lady acts as your clerk under your instructions in performing these duties?

21 A. Yes, sir.

Q. 8. I show you three papers, one appearing to be the Postmaster's receipt, dated May 15, 1897; another a receipt from the Librarian of Congress, dated May 17, 1897; and another a certificate from the Librarian of Congress for the same date. Will you please state what those papers are?

A. The first is the Postmaster's receipt for two copies of "Little Cotton Dolly" and printed title and another composition. The second paper is the receipt of the Librarian of Congress for two copies of "Little Cotton Dolly" and another composition, and the third paper is a certificate of copyright of "Little Cotton Dolly."

Complainant's counsel offers the papers in evidence, and they are marked respectively "Complainant's Exhibits 6, 7 and 8."

Q. 9. Are you acquainted with Adam Geibel, the author of this composition, "Little Cotton Dolly?"

A. Yes, sir; very well.

Q. 10. How long have you known him?

A. My acquaintance with him dates from a very short time before the publication of "Kentucky Babe." About November, 1896.

Q. 11. What dealings have you had with him?

A. I have made all the arrangements regarding royalties to be paid on all his compositions that we publish and have also done the preliminary business regarding contracts which we hold with him for special compositions; that is, his compositions in quartette form for male voices, mixed voices, and ladies' voices, compositions that we control.

Q. 12. This composition, "Little Cotton Dolly," is a companion piece to "Kentucky Babe," is it not, and so printed on the cover?

A. Yes, sir.

Q. 13. I call your attention to the fact that the written agreement offered for identification, between the complainant and

22 Geibel, relating to "Little Cotton Dolly" is dated June 18, 1897. Can you state whether or not there was any prior agreement between the complainant and Geibel relating to this composition, prior to June 18, 1897?

Objected to on the ground that it is incompetent and irrelevant, and whatever agreement may have taken place is merged in the written document which has been marked for identification.

Counsel for complainant states that the present proof is offered to show that the complainant corporation was proprietor of the composition at the time of filing the application for copyright.

A. The manuscript was furnished to us in May with the understanding that we were to publish it. The formal contract was not made until afterwards.

Same objection.

Q. 14. Please state what experience you have had which would qualify you to judge of the financial value and artistic excellence of musical compositions such as the one under consideration?

A. My qualifications for judging of such compositions are caused by long experience in connection with the publication of music of all kinds, and my education both as a musician and having been brought up with a publishing concern for so many years would naturally make me a judge of artistic value.

Q. 15. You are, then, a musician yourself, and for many years have you been employed by the complainant, and have been compelled to examine and pass upon musical compositions submitted to them, as to whether they were worth buying and had artistic
23 excellence and were likely to be appreciated by the public and prove of financial profit to the complainant?

A. Yes, sir.

Q. 16. And it was in the exercise of such judgment and discretion that you approved the purchase of the composition now under consideration, was it?

A. Yes.

Q. 17. Do you consider that the result has justified your judgment?

A. I do.

Q. 18. You have heard the testimony as to the amount of past sales and profits from the sale of this composition, and the probabilities of future sales and profits. Judging from these and from your judgment of the artistic merit of the composition, what do you think would be the value of the copyright in this composition; that is to say, the gross profit over and above the cost of manufacture and sale?

A. I should have to arrive at it in exactly the same way as Mr. Bacon did.

Q. 19. Would your opinion be in any way affected by your judgment of the artistic merit of this composition?

A. To an extent, yes.

Q. 20. In what way do you think that the artistic merit of this composition would affect the copyright?

A. When this composition was submitted to me for publication, I accepted it with the idea that it was of such a different caliber, artistically speaking, from the so-called "coon song" generally published at the time "Kentucky Babe" was published that the artistic side of the composition would appeal to the better class of people, and such proved to be the case.

Q. 21. I note that this composition bears the required
24 notice of copyright. Can you state whether or not this notice of copyright has been impressed upon every copy published and issued by the White-Smith Music Publishing Company?

A. To the best of my belief.

Q. 22. You have charge of the publication and issue of all copies, do you not?

A. Yes.

Q. 23. And this notice of copyright is always put upon the plate from which these compositions are printed, is it?

A. It is on the plate from which the transfer is made, from which the compositions are printed.

Cross-examination by Mr. WILCOX:

X Q. 24. Do you know whether the use of this song has ever been granted by license to anybody else?

A. It never has been licensed to anybody else to my knowledge.

BANKS M. DAVISON.

It is hereby stipulated, for the purposes of this suit, that the first publication of the musical composition "Little Cotton Dolly" was made by the White-Smith Music Publishing Company not earlier than the 17th day of May, 1897.

25 BOSTON, *October* 10, 1902.

Deposition of Annie E. Whalen.

Direct examination by Mr. MOODY:

Q. 1. Please state your name, age, residence and occupation.

A. Annie E. Whalen; age twenty-five; residence, Boston; occupation, assistant bookkeeper for the White-Smith Music Publishing Company.

Q. 2. Have you examined the books of the White-Smith Music Publishing Company to discover how many copies of different arrangements of the song, except the quartettes, "Little Cotton Dolly," have paid royalties to Mr. Geibel up to June 4, 1902?

A. I have.

Q. 3. Have you a transcript taken from the books showing the amount of the various arrangements on which royalties have been paid?

A. I have, and produce it.

Q. 4. Is this statement correct to the best of your knowledge and belief?

A. It is.

The statement so produced is offered in evidence and marked "Complainant's Exhibit No. 9."

Q. 5. Do you know whether or not royalties have been paid to Mr. Adam Geibel on the number of compositions named in this schedule?

A. I do not.

ANNIE E. WHALEN.

26 BOSTON, *October* 10, 1902.

Deposition of James J. Maguire.

JAMES J. MAGUIRE, being duly sworn on behalf of the complainant, testified as follows:

Direct examination by Mr. MOODY:

Q. 1. Please state your name, age, residence and occupation.

A. James J. Maguire; forty-six; South Boston; superintendent of the White-Smith Music Publishing Company.

Q. 2. How long have you been connected with the company and its predecessors?

A. Thirty-two years.

Q. 3. Can you state how many copies of the quartette arrangement of "Little Cotton Dolly" have been sold by the White-Smith Music Publishing Company since the copyright?

A. We have printed thirteen thousand eight hundred of the quartette; we have on hand seven hundred copies. We have sold the difference.

Q. 4. Do you, of your own knowledge, know that the difference between seven hundred and thirteen thousand eight hundred copies of the "Little Cotton Dolly" have been sold by the White-Smith Music Publishing Company?

A. I know that all the difference has been sold, every copy.

Q. 5. What means have you of knowing that they have actually been sold?

A. I open the mail every morning and I judge by the orders and the charges.

Q. 6. Will your books show that thirteen thousand one hundred copies of the "Little Cotton Dolly" quartette have been sold?

A. The books and the orders together will show that.

27 Q. 7. Will you produce the books or orders showing that that there have been actually sold of the "Little Cotton Dolly" quartette thirteen thousand one hundred copies.

A. In answering your question I will say that in cases like this, where no royalty account has to be kept, the only account that we keep is a printing account. We keep an account of every edition printed and the number thereof. As we never consign or otherwise dispose of any copies, except in the way of *bona fide* sale, the only account that we need keep and do keep, is the number of copies printed, because we know that every copy that is not found on hand has been sold.

Q. 8. How much per copy do you receive for the quartette?

A. We have sold it at different prices. We have sold it from seven and a half to nine cents a copy. We sold perhaps half the edition at nine cents.

Q. 9. You claim that you have printed thirteen thousand eight hundred copies of "Little Cotton Dolly." Where do you get those figures?

A. From the printing books.

Q. 10. Have you been personally over the printing books? Is this paper which I hold in my hand a transcript of these printing books which you personally have made?

A. Not with my own hand. It was done by three clerks under my supervision.

Q. 11. Do you know that this paper which I hold in my hand is an absolutely correct copy from your printing books of the number of copies printed of the "Little Cotton Dolly?"

A. To the best of my knowledge and belief.

Q. 12. Who made it?

A. Three of our bookkeepers, under my supervision.

JAMES J. MAGUIRE.

The memorandum referred to by the witness is offered in evidence and marked "Complainant's Exhibit No. 10."

28 Circuit Court of the United States for the Southern District of New York. In Equity.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

To the Honorable the Judges of the Circuit Court of the United States for the Southern District of New York:

White-Smith Music Publishing Company, a corporation duly organized and existing under the laws of the Commonwealth of Massachusetts, and having its principal place of business at the City of Boston, in said Commonwealth of Massachusetts, bring this its bill of complaint against Apollo Company, a corporation organized and existing under the laws of the State of New Jersey and having a place of business in the Borough of Manhattan, in the County and State of New York, in said district; and thereupon your orator complains and says:

I. That Adam Geibel, being a citizen of the United States, on or before the 1st day of November, 1896, was the author of a certain unpublished musical composition, to wit, "Kentucky Babe Schottische."

II. That at all times herein referred to Daniel L. White was a citizen of the United States and of the Commonwealth of Massachusetts. That on or about the 17th day of November, 1896,
29 the said Adam Geibel assigned, transferred and sold unto the said Daniel L. White, under the name of White-Smith Music Publishing Co. (that being the name and style under which the said Daniel L. White was transacting business), the said musical composition, "Kentucky Babe Schottische," together with the full and exclusive right of copying, publishing and selling the same in the United States whereby and by virtue of said assignment, transfer and sale the said Daniel L. White became the sole owner and proprietor of the said musical composition entitled as aforesaid.

III. That before the publication of the aforesaid musical composition in this or any foreign country, to wit, on the 23rd day of November, 1896, the said Daniel L. White, a citizen of the United States as aforesaid, being the sole proprietor of said musical composition and doing business under the name of White-Smith Music Publishing Co., deposited within the mail within the United States, addressed to the Librarian of Congress, at Washington, District of Columbia, a printed copy of the title of the said musical composition and likewise two copies of the said musical composition, and also the sum of fifty cents for recording the title of said musical composition, and that the Librarian of Congress duly received the aforesaid sum of money and duly recorded the title aforesaid on the 25th day of November, 1896; and that the aforesaid printed copy of the title and the aforesaid two copies of the said musical composition were delivered at the office of the Librarian of Congress at Washington, District of Columbia, on the 25th day of November, 1896; that by reason of the premises and of the statutes in such case made and provided there were secured to said Daniel L. White, his executors, administrators and assigns, or intended so to
30 be, for the term of twenty-eight years from the said 25th day of November, 1896, the sole liberty of printing, reprinting, publishing, completing, copying, executing, finishing and vending the said musical composition, and likewise the exclusive right to dramatize or translate the same.

IV. That the first publication of the said musical composition in this or any foreign country was made by the said Daniel L. White, doing business as aforesaid under the name and style of White-Smith Music Publishing Co., on the 23rd day of November, 1896, at said City of Boston, and that until April 17, 1897, the said musical composition continued to be so published.

V. That thereafter and on or about the 17th day of April, 1897, the said Daniel L. White, doing business as aforesaid under the name and style of White-Smith Music Publishing Co., duly assigned, transferred and set over, by a written instrument, his said copyright for the said musical composition to your orator, and that your orator thereupon became, and has ever since been, and now is, the assignee of said copyright, and by virtue of said assignment, transfer and sale acquired the sole liberty, under the laws of the United States, of printing, reprinting, publishing, completing, copying, executing, finishing and vending the said musical composition, and likewise the exclusive right to dramatize or translate the same.

VI. That upon every copy of the said musical composition published by your orator or its assignor, the said Daniel L. White, there has been inscribed upon some visible portion thereof the copyright notice required by law in the words following: "Copyright 1896 by White-Smith Music Pub. Co."

VII. That the said copyrighted musical composition
31 being the subject matter of this litigation, is of great value, and that it exceeds in value the sum of five thousand dollars.

VIII. That the defendant, well knowing the premises and the rights secured to your orator as aforesaid, but contriving to injure your orator and to deprive it of the benefits and advantages which might and otherwise would accrue unto it, on or about the 1st day of January, 1902, and since, and without the consent of your orator, and against the will of your orator, and in violation of your orator's rights, and in infringement of said copyright, did, as your orator is informed and believes, at the City of New York, in the County and State of New York, and at other places within the United States, publish and sell great numbers of copies of said musical composition, the property of your orator, and for which your orator has obtained said copyright as aforesaid, and that the defendant still continues so to do, and that it is threatening to publish and sell copies of the aforesaid musical composition in large quantities, and to supply the market therewith.

IX. That your orator cannot with certainty state the exact amount of profits by the defendant aforesaid sought to be diverted to itself, but believes the same to be of the full sum of five thousand dollars and so charges the fact to be, and prays that said defendant may full and true disclosures make as to the same and may be decreed to account therefor in full.

X. To the end, therefore, that your orator may obtain relief in the premises in this Honorable Court, and because it is without remedy elsewhere, it humbly prays:

1. That the said Apollo Company may be made defendant
32 to this bill and compelled to answer each and every allegation therein contained as fully as if directly interrogated as to each (but not under oath, an answer under oath being waived).

2. And your orator prays you Honors to grant unto your orator a writ of injunction under the seal of this Honorable Court, directed to the said Apollo Company, and its agents and servants, enjoining it and them, and each of them, from copying, publishing, selling or offering for sale your orator's said copyrighted musical composition, or any colorable imitation thereof, and that they may be likewise so enjoined pending the determination of this suit.

3. That the said Apollo Company, by the decree of this Court, may be compelled to account for and pay over to your orator all the profits which the defendant has derived or shall have derived from any copying, publishing, selling or offering for sale of the said musical composition as aforesaid, and also to pay the costs of this suit, and for such other and further relief as the equity of the case or the Statutes of the United States may require and to this Court may seem just.

4. And, further, to the end that equity may be done and that the relief herein prayed for, and all other relief that may be righteous in the premises to administer, may be afforded your orator, may it please your Honors such relief fully to grant and to award against the said Apollo Company a writ of subpœna of the United States, commanding it, on a certain day to be named and under a certain penalty, to be and appear in this Honorable Court, then and

there to answer all and singular the premises, and to stand to, perform and abide such further order, direction and decree as may be made against it.

33 And your orator, as in duty bound, will ever pray, &c.

DICKERSON, BROWN & RAEGENER,
Sol'rs for Complainant.

EDWIN H. BROWN,
LOUIS C. RAEGENER,
ALEX. P. BROWNE,
Of Counsel.

STATE OF MASSACHUSETTS, *County of Suffolk, City of Boston, ss:*

Daniel L. White, being duly sworn, deposes and says, that he is the President of the White-Smith Music Publishing Company; that he has read the foregoing bill of complaint by him subscribed on behalf of the complainant, and that he knows the contents thereof to be true of his own knowledge, except as to the matters therein stated to be alleged upon information and belief, and as to those matters he believes it to be true.

DANIEL L. WHITE.

Sworn to before me this 29th day of May, 1902.
[L. S.] EDWARD C. BOURNE,
Notary Public.

[Endorsed:] "Filed June 2, 1902."

Replication in usual form filed September 1, 1902.

34 Circuit Court of the United States for the Southern District of New York. In Equity.

No. 8127.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

"Kentucky Babe Schottische."

Testimony taken, pursuant to notice, before George Lemist Clarke, Esq., Notary Public, at the office of Alexander P. Browne, Esq., 31 State Street, Boston, Mass., on Friday, October 10, 1902, at 11 a. m.

Present: Alex. P. Browne, Esq., and S. L. Moody, Esq., of Counsel for Complainant.
Paul Wilcox, Esq., of Counsel for Defendant.

Complainant's counsel offers in evidence certified copy of the charter of the White-Smith Music Publishing Company, and the

same is marked "Complainant's Exhibit No. 1." It is consented that a copy of the same may be used with the same force and effect as the original, which will be produced if desired.

Deposition of Walter M. Bacon.

Direct examination by Mr. MOODY:

WALTER M. BACON, being duly sworn, as witness for complainant, testifies as follows:

Q. 1. Please state your name, age, residence and occupation?

35 A. Walter M. Bacon; age, forty-eight; residence, Boston, Mass.; occupation, treasurer of the White-Smith Music Publishing Company.

Q. 2. For how long have you been connected with the White-Smith Music Publishing Company?

A. I have been connected with the White-Smith Music Publishing Company as a corporation and a firm for sixteen years.

Q. 3. What was the firm White-Smith Music Publishing Company? Who were the members?

A. Daniel L. White, doing business under the name and style of the White-Smith Music Publishing Company.

Q. 4. That has been the case ever since you were connected with them?

A. No; he and his father were associated together, but his father died in 1892, and Daniel L. White succeeded to the whole business after his father's death and continued as proprietor until April 16, 1897, when the concern became a corporation.

Q. 5. Are you familiar with the handwriting of Daniel L. White?

A. I am.

Q. 6. Have you seen him write frequently?

A. I have.

Q. 7. Would you know his signature if you saw it?

A. Yes.

Q. 8. I show you a paper purporting to be a bill of sale from Daniel L. White, of Boston, to the corporation, the White-Smith Music Publishing Company, of all machinery, tools, etc., music plates and copyrights, etc., belonging to the firm of the White-Smith Music Publishing Company, and ask you if you recognize the signature at the end thereof?

A. I do.

Q. 9. Whose signature is it?

36 A. Daniel L. White's. I saw him write the signature.

The bill of sale is offered in evidence and marked "Complainant's Exhibit No. 2." It is consented that a copy of the same may be used with the same force and effect as the original thereof, the original to be produced if required.

Q. 10. I show you a paper purporting to be an agreement made November 17, 1896, between the White-Smith Publishing Company

and Adam Geibel, of Philadelphia, and ask you if you know the first signature at the bottom thereof?

A. That is the signature of Daniel L. White, president of the White-Smith Music Publishing Company.

Said agreement is offered in evidence for identification and marked "Complainant's Exhibit No. 3."

Q. 11. What are your duties as treasurer of the White-Smith Music Publishing Company?

A. I have general charge of the finances and general supervision of the carrying on of the business, particularly as relates to the finance and sales department; the commercial end of the business, you might style it.

Q. 12. Who has to do with the obtaining of copyrights for the White-Smith Music Publishing Company?

A. Mr. Banks M. Davison, manager of publications, has charge of that part of the business, except as to the care of the papers. Those are placed in my custody, and examined by me from time to time, to see that they are correct.

Q. 13. I show you a draft on the Boylston National Bank to the Librarian of Congress, dated November 23, 1896, for $1.50,
37 in payment of fees for recording "Kentucky Babe Schottische," "At Eve, Mixed Voices," and "At Eve, Male Voices." Do you know the signature to that paper?

A. That is the signature of Mr. White, president of the White-Smith Music Publishing Company.

The paper is offered in evidence, together with the endorsements and stamps thereon, and marked "Complainant's Exhibit No. 4."

Complainant's counsel offers in evidence a copy of the printed musical publication issued by the complainant, the White-Smith Music Publishing Company, entitled "Kentucky Babe, a Plantation Lullaby, by Adam Geibel," and the same is marked "Complainant's Exhibit No. 5."

Q. 14. This exhibit No. 5 just offered is one of the regular publications of the complainant. I note that this is marked with the words, "Copyright 1895 by White-Smith Music Publishing Company." Can you state whether all the copies published and printed by the complainant are so marked?

A. So far as I know they are. That is a matter that comes under the immediate supervision of Mr. Davison, the manager of publications.

Q. 15. Can you state approximately how many copies of this composition have been sold by the complainant since it was copyrighted by it?

A. I can estimate approximately that the sales of the copyrighted "Kentucky Babe," as a song, and other arrangements of it, are in the vicinity of some eighty thousand.

Q. 16. Do you know whether this composition still has an active sale?

A. It has.

Q. 17. Are you able to state anything as to the value of
38 the copyright of this composition to the White-Smith Music Publishing Company? If so, please do so, and give reasons for any opinion that you may express?

A. Under our agreement with Geibel we have the right to publish this piece for the unexpired original copyright term as well as rights in the renewal, making a period of some thirty-seven years; and from the fact that the song has met with a large sale thus far, and that it is being sold well today, and is of a high standard for that class of composition, I fully believe that it is worth at least five to ten thousand dollars. In addition to the reasons before stated, the composer of the song, Mr. Geibel, is considered a man of high caliber as a music composer, both in America and in England, and his name alone in connection with any musical composition lends great value to it, that is, as a composer. Our company handle popular pieces differently from a large number of publishers, inasmuch as they do not break the market price and glut the music stores with cheap publications; that is, if we have a composition that sells, we maintain the price and find that it results in not glutting the market and using up the song before its copyright term has expired, by cheapening it. The result is that our copyrights prove valuable for many years after first publication.

Q. 18. Have you found this to be the rule with compositions possessing intrinsic merit, and which have met with the favor of the public, that their popularity, under the business methods pursued by the complainant, has continued for a long term?

A. Almost invariably. We have a large number of copyrights in our catalogue which have been published for many years, which to-day are selling just as well, if not better, than when they were first published.

Q. 19. Referring to your statement that about eighty
39 thousand copies of this song and its various arrangements have been already sold by the complainant, can you state approximately what the value of the copyright has so far been? That is what has been the profit, or the difference between the selling price and the cost of production of these eighty thousand copies approximately?

A. In the vicinity of nine thousand dollars, if not more.

Q. 20. You have referred to different arrangements of this song. What do you mean by that?

A. The melody of the song has been arranged as a quartette, to be sung by male voices and other voices. I do not know how many arrangements there are of that kind. It has also been arranged for banjo, mandolin and piano.

Q. 21. Can you state how many copies of this copyrighted composition, "The Kentucky Babe," have been sold by the White-Smith Music Publishing Company since the copyright of it?

A. Of the musical composition "Kentucky Babe," of the schottische and the song in various forms, the figures show, excluding the quartette, upon which no royalty is paid, 51,335 copies up to the first of June last.

Q. 22. Is this composition still enjoying a good sale?

A. A large sale.

Q. 23. Can you state what the profit has been on these copies, the gross profit excluding the cost of manufacture and sale?

A. I should say, roughly estimated, at least seven thousand dollars.

Q. 24. How do you make this estimation?

A. Upon the same basis as my testimony in regard to "Little Cotton Dolly."

It is consented that the basis referred to by the witness is
40 the sale of all arrangements of the song except the quartette arrangement, upon which royalties are not paid, at a gross profit to the complainant of fifteen cents per copy, and the sale of all copies of the quartette arrangement at a gross profit to the complainant of six cents per copy.

Q. 25. How do you arrive at the number of copies sold?

A. By referring to this royalty account book, in which the royalties paid to Messrs. Geibel and Buck are recorded.

Q. 26. This royalty account book does not include copies of the quartette upon which no royalties were paid, does it?

A. It does not.

Q. 27. Can you produce any memorandum showing the number of the respective arrangements upon which royalties have been paid by the complainant?

A. I can. Here it is.

Q. 28. Is this account correct? Made by yourself from the account book of which you speak?

A. It is.

The memorandum produced by the witness is offered in evidence and marked "Complainant's Exhibit No. 9."

Q. 29. The facts as to the probable expectation of future sales of this composition, due to its past sales and to the business methods of complainant, remain the same in this case as in the case of the "Little Cotton Dolly"?

A. Most emphatically so. Of the two compositions this is by far the most popular.

It is consented that the facts referred to in the last answer
41 are the facts stated in answer to Qs. 16, 17 and 18.

Q. 30. Now, upon the basis of past sales and profits already shown by you, and of the present popularity of the composition, and of expected future sales and profits, what do you consider to be the value of the copyright in this composition "Kentucky Babe Schottische"?

A. From five thousand to ten thousand dollars.

Q. 31. I show you a perforated roll, No. 3,192, entitled "Kentucky Babe Schottische, Geibel, Q. R. S. Co., Chicago, Ill., U. S. A.," bearing the initials "W. M. B., 5-26, '92," and ask you if you know what this is?

A. I identify this as a roll that I purchased May 26, 1902, at the store of Chandler W. Smith Co., 120 to 122 Boylston street, Boston,

whose business card I produce herewith. The roll when sold to me was inclosed in a box which I marked in like manner. The salesman who sold the roll to me gave me the card which I have produced, with his name written thereon, "U. Urquahart."

The roll, box and card are together offered in evidence and marked "Complainant's Exhibit No. 10."

Cross-examination by Mr. WILCOX:

X Q. 32. How do you reach the figures of 80,000 copies of arrangements sold by your corporation?

A. By estimate based on my remembrance of the royalty accounts rendered to Mr. Geibel under his agreement, and by consultation with the superintendent of our printing department as to the various arrangements that have been printed.

X Q. 33. You base your estimate entirely upon your remembrance and conversations with your manager of the printing department?

42 A. Yes, sir.

X Q. 34. Do your books show these figures anywhere?

A. Our books would show the statements of royalty made to Mr. Geibel. The royalties which were paid would show the number of copies sold on which we paid royalty. Certain arrangements of the song, such as quartettes, we do not pay royalty on. Whether our printing department would show the number of copies printed I am not prepared to state.

X Q. 35. Can you produce your books, Mr. Bacon, to show from the time your corporation purchased these copyrights, the amount of royalties paid to Mr. Geibel?

A. If counsel does not object, gladly.

Counsel for complainant states that the books will be produced at two o'clock, and cross-examination on this line is suspended until that time.

X Q. 36. Is the "Kentucky Babe" what is known in music as a popular piece?

A. A popular composition of the better grade.

X Q. 37. Is it not a fact that pieces known as those having popularity have, as a rule, a short life?

A. Not of the class of compositions like these.

X Q. 38. Do you consider the composition "Kentucky Babe" a composition of a higher grade than a popular composition?

A. I consider it of a higher grade than the popular composition known as the coon song. In fact, not in the same class as what is known as the coon song.

X Q. 39. Then you consider that a composition such as "Kentucky Babe" would have a substantial value during the whole of its life as a copyright composition?

43 A. I do, on account of the name of the composer being associated with it. Mr. Adam Geibel is a musician of high repute, being prominently identified with many successes; he is also a teacher of music in the public schools of Philadelphia.

X Q. 40. State your reasons for thinking Mr. Geibel to be a composer of considerable reputation?

A. I know that Mr. Geibel is a composer who is sought after by all the leading publishers of the country and of England, as a man desirable to be a contributor to their catalogues on account of the popularity of his compositions.

X Q. 41. Have you known other publishers than yourselves to seek after his compositions in this country? If so, state the names of some.

A. The opinion I have in regard to the question you ask I have obtained from Mr. Davison, the manager of publications of our company.

Counsel for defendant moves to strike out the answer as being irresponsive and secondary evidence.

A. I might also state that I know by reason of coming in contact with other publishers how Mr. Geibel is regarded by them. In other words, it is general trade knowledge that Mr. Geibel is a desirable man to be a contributor to a publisher's catalogue.

Same objection.

X Q. 42. You do not know the names of any publishers other than yourselves who have sought the publications of Mr. Geibel?

A. Not of my own knowledge.

X Q. 43. How do you know of your own knowledge that this copyrighted song "Kentucky Babe" still has an active sale?

A. By seeing the orders that come in to us from the purchasing people.

44 X Q. 44. Can you produce those orders?

A. I can produce those orders, but it would be a week's work to do so. The royalty accounts as shown on our books are the basis of our estimate.

X Q. 45. Have you personally looked over these book accounts before giving your testimony in this suit?

A. The royalty accounts I have looked over in a general way.

X Q. 46. While considering the reputation of Mr. Geibel I omitted to ask you how you knew that he had a reputation as a good composer in England?

A. I have just returned from England and visited the trade there and know how he is regarded among the trade.

X Q. 47. Did you discuss Mr. Geibel's reputation with any music publishers in England?

A. I did, with the firm of Charles Sheard & Company, of London, and J. Curwen & Son, Limited, of London.

X Q. 48. As far as the "Kentucky Babe" is concerned, what is the nature of the royalty that you pay to Mr. Adam Geibel? Upon what compositions?

A. We pay a royalty on the song, the schottische, the mandolin and guitar arrangement, the mandolin and piano arrangement, and the banjo arrangement. We do not pay a royalty on the quartette arrangements.

X Q. 49. Have you taken out a separate copyright upon the quartette arrangements?

A. We copyright every arrangement as issued.

X Q. 50. Then you have taken out a copyright on the quartette arrangements?

A. As a matter of precaution we have.

X Q. 51. State how you arrive at the conclusion that your profits on the song "Kentucky Babe" have amounted to $9,000 up to the present time.

A. In figuring the value at $9,000 I estimate that 30,000
45 copies of the quartette arrangement were sold at a profit of six cents per copy, and 50,000 copies of the other arrangements at fifteen cents a copy, which mentally I figured would amount to about $9,000.

X Q. 52. Do you know of your own knowledge that 30,000 copies of the quartette have been sold?

A. I do not.

X Q. 53. Do you know of your own knowledge that 50,000 of the other arrangements have been sold?

A. I know that 51,335 of the other arrangements have been sold, as shown in "Complainant's Exhibit No. 9."

X Q. 54. Are the profits that you have just spoken of gross or net profits?

A. Gross profits. Royalties are not deducted.

X Q. 55. Then I understand that in stating that the profits have been nine thousand dollars, you have not deducted the royalties paid to Mr. Geibel. Am I correct?

A. You are correct.

X Q. 56. Do you know of your own positive knowledge that royalties were paid to Adam Geibel on 51,335 copies of a piece of music called "Kentucky Babe," in the form of a song, a schottische, mandolin and guitar, mandolin and piano, and banjo?

A. I do.

X Q. 57. How much per copy?

A. Ten per cent. of the retail price, according to the agreement, "Complainant's Exhibit No. 3," for identification, which is from three to four cents per copy.

X Q. 58. How much do you receive for the song?

A. Sixteen and two-thirds cents is the average price received per copy. That is the least wholesale price. Frequently we receive more. The average price is sixteen and two-thirds cents.

X Q. 59. You have received sixteen and two-thirds cents
46 per copy from the sales of the song. How much have you received from the sale of the schottische?

A. Sixteen and two-thirds cents, the same as for the other arrangements.

X Q. 60. What does this lawsuit apply to?

A. Infringement on our copyrighted musical compositions "Kentucky Babe."

X Q. 61. Did you copyright "Kentucky Babe" as a song or as a musical composition?

Objected to as the papers in evidence speak for themselves.

A. We copyrighted it as a musical composition.

X Q. 62. You have stated that in computing the profits on this composition "Kentucky Babe" you have not included the royalties paid to Geibel. Have you included any other item of expense?

A. I have included everything except the royalties.

X Q. 63. Do you usually include royalties when figuring expense items on musical compositions?

Question objected to inasmuch as the witness on direct-examination was expressly asked to give the value of the copyright and not the net profit made by the complainant upon the sale of the copyrighted article.

X Q. 64. How do you arrive at the figures you have given in the question of the cost of "Kentucky Babe"?

A. I have heretofore testified that I estimated the total sales of "Kentucky Babe" at 80,000 copies, 50,000 of which were song and other arrangements except quartettes. On these I figure a profit of fifteen cents per copy. On the quartettes I figure a profit of six cents per copy.

X Q. 65. How do you figure a profit of six cents per copy on the quartettes?

47 A. The quartettes net us on the average from seven to eight cents a copy. I figure an average profit of six cents a copy by substracting a cost of from one to two cents per copy for printing and paper.

X Q. 66. How do you get at the figures of from one to two cents for paper and printing per copy?

A. From my general knowledge of the publishing and printing business.

X Q. 67. Do you charge up any other items of expense against cost other than paper and printing?

A. Not as a general thing on a musical composition which has the large sales that the "Kentucky Babe" has had. Had it a smaller sale I should take into consideration the fact of the cost of the plates. These plates for a quartette will cost about two dollars, which never afterwards has to be taken into consideration, as the plates will last forever, as we do not print directly from them.

X Q. 68. Do you ever charge up items of interest, depreciation in plant, rent, and insurance, against the item of profit?

A. Not in figuring profits on any one piece.

X Q. 69. Do you know of your own knowledge how many copies of the quartette have been sold.

A. I do not.

Redirect examination by Mr. MOODY:

R. D. Q. 70. Please state what your acquaintance is with the music publishing trade in this country and abroad; and what means you have for knowing the repute and popularity of Mr. Geibel as a composer?

A. Being a prominent officer of the Music Publishers' Association

of the United States, viz., Chairman of the Executive Committee, I have an extensive and thorough acquaintance with all the
48 publishers of the United States, and with a large number of English, French and other publishers, having recently returned from a trip to England and France partially in the interests of the Association. This enables me through my acquaintance to express the opinions which I have expressed.

R. D. Q. 71. Your opinion then that Mr. Geibel is a composer of great repute, and that his compositions are much sought after and considered valuable in the music-publishing trade is based upon your acquaintance with music publishers here and abroad and the conversations you have had with them upon musical matters from time to time?

A. It is.

Recross-examination by Mr. WILCOX:

R. X Q. 72. When did you buy your last piece of music from Adam Geibel?

A. I cannot testify as to that of my own knowledge. We are buying them right along. I will add that Mr. Geibel is under contract with us for a term of years for all of his compositions of a certain class.

Signature of witness waived.

Deposition of Banks M. Davison.

BANKS M. DAVISON, a witness called on behalf of complainant, being duly sworn, testifies as follows:

Direct examination by Mr. MOODY:

Q. 1. Please state your name, age, residence and occupation?

A. Banks M. Davison; age, 43; Newton, Mass.; occupation, musician and manager of publications of the White-Smith Music Publishing Company.

49 Q. 2. How long have you been connected with the complainant and its predecessors?

A. About twenty years.

Q. 3. How long have you been manager of publications for the complainant and its predecessors?

A. For the last ten years.

Q. 4. Please state generally what your duties are as such manager.

A. I have charge of buying manuscripts and seeing that they are engraved and copyrighted when they are ready for publication. In fact, as the manager of publications for our firm I follow the manuscript from the time it is submitted to the time of its publication.

Q. 5. Do I understand that you examine the manuscript to see whether it is desirable for purchase?

A. Yes, sir.

Q. 6. What do you have to do, if anything, with the copyrighting of musical compositions acquired by the complainant?

A. When the composition is printed ready for publication, I take the necessary copies, the two copies and title, from what we call our publication counter. I take these two copies and title in to the lady clerk who does the clerical work of copyrighting, and instruct her with regard to the copyrighting of the piece, and whether it is to be simply a domestic copyright or international. If it is a domestic copyright, I instruct her that it is so, and that this being the day of publication, of course it is the day for her to attend to the matter, which she does under my instructions. If it is an international copyright, the procedure is practically the same, with the exception that the copies and title necessary for the entrance of copyright, she is instructed to send to Washington two days before the date agreed upon for publication in both countries. That is so that she
50 can instruct the Librarian to make the date agree on both papers, and to give it time to get there.

Q. 7. Do I understand that this young lady acts as your clerk under your instructions in performing these duties?

A. Yes, sir.

Q. 8. I show you three papers, one appearing to be the Postmaster's receipt dated November 23, 1896; another a receipt from the Librarian of Congress, dated November 25, 1896; and another a certificate from the Librarian of Congress, dated May 19, 1902. Will you please state what those papers are?

A. The first is the Postmaster's receipt for two copies of "Kentucky Babe" and printed title, and other compositions; the second paper is the receipt of the Librarian of Congress for two copies of "Kentucky Babe" and other compositions; and the third paper is a certificate of copyright of "Kentucky Babe."

Complainant's counsel offers the papers in evidence, and they are marked respectively "Complainant's Exhibits 6, 7 and 8."

Q. 9. Are you acquainted with Adam Geibel, the author of this composition, "Kentucky Babe?"

A. Yes, sir; very well.

Q. 10. How long have you known him?

A. My acquaintance with him dates from a very short time before the publication of "Kentucky Babe." About November, 1896.

Q. 11. What dealings have you had with him?

A. I have made all the arrangements regarding royalties to be paid on all his compositions that we publish, and have also done the preliminary business regarding contracts which we hold with him for special compositions; that is, his compositions in quartette form for male voices, mixed voices and ladies' voices, compositions that we control.

51 Q. 12. Please state what experience you have had which would qualify you to judge of the financial value and artistic excellence of musical compositions such as the one under consideration?

A. My qualifications for judging of such compositions are caused by long experience in connection with the publication of music of all kinds, and my education both as a musician, and having been

brought up with a publishing concern for so many years would naturally make me a judge of artistic value.

Q. 13. You are then a musician yourself, and for many years you have been employed by the complainant, and have been compelled to examine and pass upon musical compositions submitted to them, as to whether they were worth buying, and had artistic excellence, and were likely to be appreciated by the public and prove of financial profit to the complainant?

A. Yes, sir.

Q. 14. And it was in the exercise of such judgment and discretion that you approved the purchase of the composition now under consideration, was it?

A. Yes.

Q. 15. Do you consider that the result has justified your judgment?

A. I do.

Q. 16. You have heard the testimony as to the amount of past sales and profits from the sale of this composition, and the probabilities of future sales and profits. Judging from these and from your judgment of the artistic merit of the composition, what do you think would be the value of the copyright in this composition, that is to say, the gross profit over and above the cost of manufacture and sale?

A. I should have to arrive at it in exactly the same way as Mr. Bacon did.

52 Q. 17. Would your opinion be in any way affected by your judgment of the artistic merit of this composition?

A. To an extent, yes.

Q. 18. In what way do you think that the artistic merit of this composition would affect the copyright?

A. When this composition was submitted to me for publication, I accepted it with the idea that it was of such a different caliber, artistically speaking, from the so-called "coon song" generally published at the time, that the artistic side of the composition would appeal to the better class of people, and such proved to be the case.

Q. 19. I note that this composition bears the required notice of copyright. Can you state whether or not this notice of copyright has been impressed upon every copy published and issued by the White-Smith Music Publishing Company?

A. To the best of my belief.

Q. 20. You have charge of the publication and issue of all copies, do you not?

A. Yes.

Q. 21. And this notice of copyright is always put upon the plate from which these compositions are printed, is it?

A. It is on the plate from which the transfer is made, from which the compositions are printed.

Cross-examination by Mr. WILCOX:

X Q. 22. Do you know whether the use of this song has ever been granted by license to anybody else?

A. It never has been licensed to anybody else to my knowledge.

Signature of witness waived.

53 BOSTON, *October* 10, 1902.

Deposition of James J. Maguire.

JAMES J. MAGUIRE, being duly sworn on behalf of the complainant, testifies as follows:

Direct examination by Mr. MOODY:

Q. 1. Please state your name, age, residence and occupation.

A. James J. Maguire; forty-six; South Boston; superintendent of the White-Smith Music Publishing Company.

Q. 2. How long have you been connected with the company and its predecessors?

A. Thirty-two years.

Q. 3. Can you state how many copies of the quartette arrangement of "Little Cotton Dolly" have been sold by the White-Smith Music Publishing Company since the copyright?

A. We have printed thirteen thousand eight hundred of the quartette; we have on hand seven hundred copies. We have sold the difference.

Q. 4. Do you, of your own knowledge, know that the difference between seven hundred and thirteen thousand eight hundred copies of the "Little Cotton Dolly" have been sold by the White-Smith Music Publishing Company?

A. I know that all the difference has been sold, every copy.

Q. 5. What means have you of knowing that they have actually been sold?

A. I open the mail every morning and I judge by the orders and the charges.

Q. 6. Will your books show that thirteen thousand one hundred copies of the "Little Cotton Dolly" quartette have been sold?

A. The books and the orders together will show that.

Q. 7. Will you produce the books or orders show——

54 —. —sign or otherwise dispose of any copies, except in the way of *bona fide* sale, the only account that we need keep and do keep is the number of copies printed, because we know that every copy that is not found on hand has been sold.

Q. 8. How much per copy do you receive for the quartette?

A. We have sold it at different prices. We have sold it from seven and a half to nine cents a copy. We sold perhaps half the edition at nine cents.

Q. 9. You claim that you have printed 31,350 copies of "Kentucky Babe" quartette. Where do you get these figures?

A. From the printing books.

Q. 10. Have you been personally over the printing books? Is this paper which I hold in my hand a transcript of these printing books which you personally have made?

A. Not with my own hand. It was done by three clerks under my supervision.

Q. 11. Do you know that this paper which I hold in my hand is an absolutely correct copy from your printing books of the number of copies printed of the "Kentucky Babe?"

A. To the best of my knowledge and belief.

Q. 12. Who made it?

A. Three of our bookkeepers, under my supervision.

The memorandum referred to by the witness is offered in evidence and marked "Complainant's Exhibit No. 11."

Signature of witness waived.

It is agreed that the foregoing is a true copy of the depositions of Walter M. Bacon, Banks M. Davison and James J. Maguire, taken in this cause on October 10, 1902, and the certificate of the examining officer thereto is hereby waived.

55 NEW YORK, *December* 10, 1902.

Met pursuant to notice.

Present: S. L. Moody, Esq., of Counsel for Complainant.
Paul Wilcox, Esq., of Counsel for Defendant.

ADOLF L. JANSON, being duly sworn, as a witness on behalf of complainant, testifies as follows:

Q. 1. What is your name, age, residence and occupation?

A. Adolf L. Janson; age, twenty-nine; residence, Brooklyn; occupation, clerk for the defendant, Apollo Company.

Q. 2. Are you the person who was subpœnaed yesterday to attend here?

A. I accepted it in the name of the Apollo Company.

Q. 3. Who was the person upon whom the subpœna was actually served?

A. He is the man that has charge of the floor downstairs; he has charge of the sales. He is practically the sales manager—H. H. Pottle.

Q. 4. What is your position in the defendant company?

A. Cashier and bookkeeper.

Q. 5. How long have you been cashier and bookkeeper?

A. About eighteen months.

Q. 6. I show you a catalogue, being a quarterly supplement of music for the Apollo and other instruments, and ask you whether that is a catalogue which is issued and distributed by the Apollo Company?

A. Yes, sir.

56 Q. 7. I call your attention to the third line from the bottom of page 23, "4559, Little Cotton Dolly—Plantation Lullaby (C), A. Geibel, $1.80," and ask you whether that entry means that the Apollo Company has for sale roll music for the Apollo corresponding to that number and title?

A. Yes, sir.

Q. 8. How long have they sold this roll, if you know?
A. We have had it for sale since the issue of that catalogue.
Q. 9. At what time approximately was that catalogue issued?
A. In March, 1902.

The catalogue is offered in evidence and marked "Complainant's Exhibit No. 11, Defendant's Catalogue."

Q. 10. I show you a perforated music roll bearing a label with the name "Little Cotton Dolly" and marked in pencil "May 16, 1902, C. H. S.," and ask you if that is one of the music rolls such as is advertised in the catalogue just offered in evidence at the place pointed out on page 23?
A. Yes, sir.
Q. 11. And that is such a music roll as has been offered for sale by the defendant company?
A. Yes.
Q. 12. How long has that been offered for sale, do you know?
A. To my knowledge since the catalogue has been issued.
Q. 13. Can you state whether rolls such as that have been actually sold by the company?
A. No, sir.
Q. 14. You do not know?
A. No.
Q. 15. Who would know?
A. I don't know any one who would know. The only way we have of reckoning that thing is, when the rolls are sold at
57 numerous times the salesman would not send up the slip with the number on it. He would simply send up one roll $1.80, one roll $2, and one roll $3, or music $3.

The roll just shown the witness is marked "Complainant's Exhibit No. 12 for Identification."

Q. 16. Can you state whether the defendant company has made or used rolls similar to the one just shown you?
A. We have not made any, no, sir, but we have used them in the ware-rooms.
Q. 17. And you don't know yourself whether the defendant company has sold any?
A. No, sir.
Q. 18. Who are the present officers of the defendant company?
A. Mr. Frank P. Anderson is president; Mr. Charles H. Wagner is vice-president, and Mr. G. F. Abendschein is secretary and treasurer.
Q. 19. Are these gentlemen usually at the office of the Apollo Company on Fifth avenue during business hours?
A. No, sir.
Q. 20. What I wish to find out is whether the defendant company has made, used or sold music rolls such as the one just shown you and marked for identification; you have stated that they have used them in the ware-rooms; now, will you please state in your own way

what is the business of the defendant with relation to these perforated music rolls?

A. We have not made any rolls, nor do we manufacture any article that we sell at our store; we are simply selling agents for the Apollo instrument, and the music, of course, that goes with it; we have used the rolls in our store, but, to the best of my knowledge, we have not sold any.

58 Q. 21. Do you mean that your company is merely a company for demonstrating the use of the instruments and the quality of the music produced, or does it do any commercial selling business at all?

A. Yes, sir; we do commercial selling business.

Q. 22. What do you sell?

A. We sell the Apollo, the Apollo Grand, the Orpheus and music for the same—perforated rolls.

Q. 23. Who is there connected with your company who would know and who can testify as to any individual piece of roll music, or say this Exhibit No. 11 for identification, and state whether or not rolls of that number and title have been sold by the Apollo Company?

A. So far as I know the only persons who would actually know these facts are salesmen who may have sold such rolls; I do not think that our books would show what particular rolls were sold either by number or by name, except possibly in an occasional instance.

Q. 24. Who makes these music rolls that your company offers for sale?

A. The Q. R. S. Company of Chicago.

Q. 25. What is the real name of that company?

A. I do not know.

Q. 26. I notice that that name is upon the label attached to the music roll offered for identification; can you tell me where the office of that company is?

A. Presumably in Chicago, to the best of my knowledge.

Q. 27. Who orders these rolls from the Q. R. S. Company for the defendant?

A. Melville Clark Piano Company, and we order from the Melville Clark Piano Company.

Q. 28. What is the address of this company?

A. 399 West Madison street, Chicago.

59 Q. 29. Then all you know as to the origin of these music rolls is that you get them from the Melville Clark Piano Company and that they appear to be manufactured by a company called the Q. R. S. Company?

A. Yes.

Q. 30. You use them on your instruments in your store, 101 Fifth avenue, and offer them for sale, and as to any individual sales one of the salesmen would be likely to know?

A. Yes.

Q. 31. I show you a receipted bill with the Apollo Company letter head, dated May 16, 1902, and stamped with the receipt and said

date, referring to music rolls, one of which is No. 4559, the same number as "Complainant's Exhibit No. 12 for Identification," and ask you whether that is a receipt from your company for this roll, which I have shown you or a similar one?

A. Yes, sir.

The receipt shown the witness is marked in evidence "Complainant's Exhibit No. 13, Defendant's Receipt."

Q. 32. What is Mr. Pottle's position in your company?

A. Sales manager.

Q. 33. How long has he been with you?

A. About four months.

Q. 34. Who was sales manager before him?

A. There was no sales manager before him?

Q. 35. Who had charge of the sales and answered inquiries for roll music during the month of May and June of this year.

A. Mr. Theodore Pfafflin; he was manager and took charge of everything then.

Q. 36. For how long was he manager and in charge?

A. One year—that is one year up to May, 1902.

Q. 37. Who succeeded him as manager?

A. Mr. Frank P. Anderson.

60 Q. 38. How old a man is Mr. Anderson?

A. I don't know. Approximately, I should say about fifty—in the neighborhood.

Q. 39. Wasn't there a young man about your age in charge of the store floor of your place of business about the last of May or the first of June of this year?

A. Well, we had a man there by the name of Smith that was running our music library and also attended to the wareroom floor.

Q. 40. Do you know where this Mr. Smith is now?

A. Yes, sir. He is with the Simpson-Crawford Co., on Sixth avenue, this city.

Q. 41. Does your company carry in stock all the roll music referred to in the catalogue Exhibit 11?

A. No, we do not—not in this catalogue, for we discontinued that 4,559. That has been withdrawn from the library.

Q. 42. Since when?

A. I cannot recall the exact date. On instructions of counsel, since about the time this suit was commenced.

Q. 43. Does your testimony already given also apply, except for the receipt, to No. 3,192, Kentucky Babe Schottische, by Geibel? Those two have been withdrawn?

A. Yes, they have been withdrawn from our library, on advice from counsel, shortly after the beginning of this suit.

Q. 44. And prior to the beginning of the suit this No. 3,192 Kentucky Babe roll was also carried in stock and offered for sale by your company?

A. Yes, sir.

Q. 45. But the same uncertainty as to individual sales exists with regard to this roll also?

A. Yes, sir.

Q. 46. Do you have any business relations with the
61 Chandler W. Smith Co., of 120-122 Boylston street, Boston?

A. No, sir.

Q. 47. Do you sell roll music in Boston?

A. No, sir. The defendant company is a New Jersey corporation, and has no rights to sell in Boston at all, that territory being controlled by another corporation.

Q. 48. From whom does your company derive its rights to sell in New York, from the Q. R. S. Co.?

A. No, from the Melville Clark Piano Co.

Q. 49. What is your territory?

A. In the New England States, with the exception of Connecticut and the City of Boston; also New York and New Jersey, as far as I can remember. I have not seen the charter, so I do not know definitely.

It is stipulated that the music roll marked Exhibit No. 12 for identification was sold by the defendant to Mr. Charles H. Shaw on the 16th day of May, 1902, and that the receipt offered in evidence is the receipt for said Exhibit No. 12.

The music roll is now offered in evidence and marked "Complainant's Exhibit No. 12."

No cross-examination.

Signature waived.

62 United States Circuit Court, Southern District of New York.
In Equity.

WHITE-SMITH MUSIC PUBLISHING CO.
vs.
APOLLO COMPANY.

Testimony taken on behalf of complainant, pursuant to notice, under and pursuant to the 67th Rule of the Supreme Court, as amended, before John A. Shields, Esq., Standing Examiner, at the offices of Dickerson, Brown, Raegener & Binney, No. 141 Broadway, New York City, on Tuesday, December 30, 1902, at 11 a. m.

Appearances.

Alexander P. Browne, Esq., and Louis C. Raegener, Esq., of Counsel for Complainants.

Charles S. Burton, Esq., and Edward S. Evarts, Esq., of Counsel for Defendants.

RICHARD H. BUCK, a witness called and sworn on behalf of complainant, testified as follows:

Direct examination by Mr. BROWNE:

Q. 1. Please state your full name?

A. Richard H. Buck.

Q. 2. Your residence?
A. Hotel Cumberland, Philadelphia, Pa.
Q. 3. Your occupation or profession?
A. Hosiery manufacturer.

Q. 4. I show you a printed copy of a musical publication
63 entitled "Little Cotton Dolly," Complainant's Exhibit No. 5, by Richard Henry Buck, music by Adam Geibel, and ask you whether or not you are the Richard Henry Buck therein named?
A. I am.
Q. 5. Please state whether or not the words of this song "Little Cotton Dolly" were original with yourself?
A. They were.
Q. 6. The song in question is marked "Copyright 1897 by White-Smith Pub. Co." Please state whether or not you know that concern, and if yes, where their principal place of business is?
A. Yes; 62 and 64 Stanhope street, Boston, Massachusetts.
Q. 7. Please state whether or not the copyright upon this song was taken by the White-Smith Publishing Company by arrangement with yourself?
A. It was.
Q. 8. Please state whether or not you have authorized anyone other than the White-Smith Music Publishing Company to reproduce in any form the words of this song, Complainant's Exhibit No. 5?
A. I have authorized no one but the White-Smith Company.
Q. 9. Please state whether or not your authorization to the White-Smith Music Publishing Company to copyright and publish this song was made prior to any publication by you or with your knowledge or consent in this or any foreign country?
A. It was.

No cross-examination.
Signature waived.

64 GEORGE C. GOW, called and sworn as a witness on behalf of complainant, testified as follows:

Direct examination by Mr. RAEGENER:

Q. 1. Please state your name, age, residence and occupation?
A. George C. Gow; age, 42; residence, Poughkeepsie, New York; occupation, Professor of Music at Vassar College.
Q. 2. Are you the composer of any pieces of music?
A. I have composed songs and piano forte music and part songs.
Q. 3. Have you written any books?
A. I have written a text book on notation and harmony.
Q. 4. What is the title of it?
A. The Structure of Music, G. Schirmer, Publisher.
Q. 5. What is a musical composition?
A. A musical composition is an orderly combination of musical tones renderable by musical instruments or the voice.

Q. 6. How is an author's composition made reproducible by others?

A. By notation.

Q. 7. You say you have heard rendered upon the piano Complainant's Exhibit No. 5, to wit, "Little Cotton Dolly," likewise Complainant's Exhibit No. 5, "Kentucky Babe Schottische," and you have also heard rendered upon a musical instrument called the Apollo Complainant's Exhibit No. 10, "Little Cotton Dolly" and likewise "Kentucky Babe Schottische," Complainant's Exhibit No. 10. Please tell us whether the musical composition "Little Cotton Dolly," rendered upon the piano and likewise upon the Apollo, were the same, and whether likewise the musical composition
65 "Kentucky Babe Schottische" rendered upon the piano and upon the Apollo were the same?

A. They were.

Q. 8. Please describe the difference in the records used in connection with the piano and with the Apollo?

A. The record used for the piano was from a notation commonly called the staff notation. The record as played by the Apollo was from an Apollo perforated roll; that is another form of notation.

Q. 9. Please define a musical instrument?

A. A musical instrument is a means of producing sound in such a way as to make what is called musical tone.

Q. 10. In order to render music or a musical composition, is the same form of record necessary?

A. No, sir; it is necessary that the musician shall know the composition. If he does not know it either from memory or as he constructs it in his own brain, then it is necessary for him to have a notation by which he may learn what the music is.

Q. 11. Ordinarily how can a musical conception be reproduced so that others can enjoy it?

A. A musical composition is reproduced by some form of a musical instrument. The person who makes use of the musical instrument translates a notation into terms of action in rendering it.

Q. 12. Ordinarily how is the musical conception recorded?

A. The musical conception is recorded by a notation. The notations have differed at different times in the history of the world and there are several systems of notation at the present in use.

Q. 13. Have you at my request made a little diagram showing some of the forms of notation that have been in use in the past years?

A. I have for you the record of the beginning of a com-
66 position which dates back to the ninth century in various notations from that time to this in use at the present.

Q. 14. Please produce it and explain it?

A. I have here the music notation to the words, "Viderunt omnes," the beginning of a piece of church music. The first notation dates from the ninth century by means of neums. The second notation is the so-called Gregorian notation at present in use for the Roman church plain song, from the sixteenth century to the present. The third notation of the same music on the modern staff. The

fourth notation by the tonic sol fa system, also modern. The fifth a new notation by an inventor called Engelke, modern. The sixth notation presents it as it would appear on an Apollo roll using blots in place of holes. Each one of these notations represents the music adequately.

Q. 15. Please state whether or not from any of the notations which you have named so much of the musical composition as is represented thereby could at any time be reproduced correctly in any of the other notations without resort to any other source?

A. Yes, sir; a musician who understood any one of those notations would sing the melody in exactly the same way as from another notation.

The paper produced by the witness marked "Complainant's Exhibit Diagram of Professor Gow, December 30, 1902, J. A. S., Ex'r."

Q. 16. It is a fact then, is it not, that any ordinary musician having any record whatever of an author's composition by means of which he can render or cause to be rendered that composition can readily reproduce that record or make other records that will be the means of enabling others to reproduce that composition?

67 A. Yes, sir.

Q. 17. In order to render a musical composition by the aid of a record arranged for the piano on the organ or violin, it is necessary to make an entirely different record: In other words a score arranged for the piano cannot be used to render the same composition with the violin?

A. It would not be the proper record for a violin or organ. A good player can off-hand supplement what is lacking in the record. A good musician arranges as he goes along, but the record which he would make for the instrument which he uses would differ from a record made for another instrument.

Q. 18. Coming back to these perforated rolls, are they records of musical compositions?

A. They are.

Q. 19. In your opinion are they as intelligible as some of the forms of notation or forms of record which preceded it in by-gone centuries?

A. Absolutely. In other words, one could reproduce in any other notation the notation of one of these rolls so as to adequately present the music.

Q. 20. Will you please state how the notation of the musical compositions in issue found in the two perforated rolls corresponds with the staff notation found in the two pieces of sheet music, Complainant's Exhibits No. 5?

A. In these two sheet music exhibits notes placed upon a staff represent the pitch and duration of the tones, and letters and other marks placed upon the staff represent those things which we call expression. In the records on the rolls perforations at certain places and of certain length represent pitch and duration of the tones and letters, and other signs placed about these represent the expression in essentially the same way as they do about the notes on a staff.

The method of notation differs; the result is the same. Either could be read by a musician so as to give him an adequate understanding of the music.

68 Q. 21. Please explain what is meant by reading of music?

A. A notation is a presentation to the eye of that which if presented to the ear would make music. A musician, therefore, may read the musical notation just as he would read a newspaper. Usually it rests with him as to whether having read the music he will produce it or not, just as he might read the newspaper out loud or get its meaning himself without making sound.

Q. 22. Please tell us what mechanical aids are used to produce music upon a large organ?

A. The musician uses his hands and feet upon keyboards and brings to his aid many mechanical levers to help the expression of the music.

Q. 23. Are these mechanical aids essential.

A. They are.

Q. 24. Now, please compare the mechanical aids just referred to used in connection with a large organ with the mechanical aids used in an instrument such as the Apollo?

A. There are four elements in the notation of music. The notation of the pitch, of the length, of the loudness and of the quality or color of the tones. Upon a large organ the musician uses mechanical aids to produce loudness and color. Upon an Apollo the musician uses mechanical aids to produce length and pitch. In either case, two out of the four elements have to be accomplished by the use of what are commonly called mechanical aids.

Q. 25. Do you use any musical instruments at Vassar College upon which you play musical compositions by means of perforated rolls similar to those before us here?

A. We use the Orchestral, an enlarged Aeolian. It is a reed organ, played by means of a roll and the hands and feet of the user.

Q. 26. The rolls used in that instrument are perforated rolls resembling the two rolls here?

69 A. Essentially the same.

Q. 27. Do you use the instrument last referred to to instruct your scholars and illustrate your lectures?

A. I do.

Q. 28. And you have used it for some time past?

A. Three or four years.

Q. 29. I show you a perforated roll which you have just heard played upon the Pianola in conjunction with a piano, and which I am assured is an original composition by Alexander Guilmant. The perforations in this roll were made, as I am assured, by means of a contrivance attached to a piano which recorded the music improvised by the composer. I am likewise assured that no other record in any shape, way or form of this improvisation is in existence. Please tell us whether you are able to reproduce a record of this improvisation in the ordinary staff notation or sheet music form, and whether you, as a matter of fact were able to read the notes and sing them, never

having seen them before, while the perforated roll was unwound and used in the Pianola?

A. I could make the notation from that roll without difficulty, and was able substantially to recognize what music would be played even before the actual notes were sounded, since I could see the record slightly before it was unwound to the place where the notes should be sounded.

Q. 30. Would it require a great deal of practice on your part to reproduce musical compositions in the ordinary staff notation if first presented to you in the shape of perforated rolls like this Guilmant roll?

A. It would take a very little while for me to become familiar with that method of reading music from this notation, and it could be reproduced in any other notation with which I was familiar.

Q. 31. If by general consent musicians or a large number
70 of teachers should agree to adopt the style of notation used upon these perforated rolls, would it be a difficult matter to get others accustomed to this style?

A. Not at all. It would soon become as easy to read as staff notation, and this notation has distinct advantages over any staff notation.

Q. 32. Then the principal reason why most of the musical compositions are recorded in the form of sheet music is because by general consent for sometime past we have become accustomed to that style of notation?

A. Certainly. It doesn't seem to me the question of ease is pertinent. For example, one might well say it is possible for every one to learn to read shorthand, and even though it was difficult to learn to read shorthand, there is no question that a shorthand written language is as adequate as the written language by means of letters.

Q. 33. We have just heard a rendering upon the Pianola of the Guilmant improvisation. Please state whether or not in your opinion the same performer playing the same composition from staff notation could give any more adequate or artistic rendering?

A. It would depend solely upon the gentlemen's ability to play the piano, which I do not happen to know.

Q. 34. Now, will you make the same comparison between the performance of the gentleman who played the pianola and a performance by some person using the pianoforte alone and the staff notation. Would it necessarily follow that in the latter case any more artistic or adequate performance would be given?

A. This roll had no marks of expression upon it. A notation on the staff could easily be made without marks of expression, although composers usually more or less fully indicate them. Such a
71 staff notation without marks of expression would be the same guide to the player as this roll was. With such a staff notation, a good pianist would give an interpretation of the music substantially no better than the one made by Mr. Chilton from this roll.

The roll is offered in evidence and marked "Complainant's Exhibit Guilmant Record, Dec. 30, 1902, J. A. S., Ex'r."

Q. 35. Coming back to this Guilmant record, that has the advantage, has it not, that it cannot only be read in the ordinary way but also serves the purpose of reproducing it in another way?

A. Certainly.

Q. 36. If all the musical instruments in the world of the type for which the perforated music rolls are ordinarily used were destroyed and this was the only record of this improvisation of Mr. Guilmant in existence; this musical composition could be reproduced, could it not?

A. It certainly could be produced on other instruments.

Q. 37. Is music reproduced by means of printed sheet music?

A. No, sir.

Q. 38. Please explain your answer?

A. A musician reads the printed sheet music and reproduces it himself upon an instrument or with his voice. The notation is the sign to him of what to produce, and he chooses his method of production.

Q. 39. Ordinarily the forms of notation are hieroglyphics to the person not familiar with that peculiar style of notation?

A. Just as you can't read Chinese.

Q. 40. And after the symbols are known to anyone he can translate them?

A. Into sound.

Q. 41. Translate them into sound?

A. Yes, sir.

Recess until 2 P. M.

72 Q. 42. What is a musical notation?

A. It is a representation to the eye by symbols of that which can be presented to the ear as music.

Q. 43. Does it make any difference upon what material the record of a musical composition is made?

A. None whatever, except as some materials are more permanent than others, wood, stone or paper or metal.

Q. 44. Does it make any difference whether the record of the musical composition is in the form of a sheet or in the form of a roll.

A. None whatever.

Q. 45. Is there any advantage in the record of a perforated roll over printed sheet music in the matter of reading?

A. A continuous roll which may be made to revolve saves the difficulty of turning pages.

Q. 46. Please read your twenty-fourth answer, and make such correction therein as you see fit?

A. In place of the word "loudness" use the word "intensity." By "mechanical aids" I mean something in addition to the keyboards of an instrument which are, of course, also mechanical in any case.

Cross-examination by Mr. BURTON:

X Q. 47. What is the purpose of presentation of a musical composition under any form of notation; is it to instruct the mind of the musician, or to actually reproduce the music, or is it something different from both of these?

A. It is to instruct the mind of the musician.

X Q. 48. If a piece of musical composition presented under the common form of staff notation should be rolled up into a tube and used as a horn, or possibly properly perforated so as to operate to an extent as a flute or fife, or instrument of that character, the
73 presence or absence of the musical notation upon it would have no importance whatever, would it, for the purpose or, as affecting the result, of the production of musical tones by means of it?

A. Unless the notation was necessary to assist in the production of the musical tones.

X Q. 49. Will you explain how the presence of notation in the ordinary staff form upon a piece of paper rolled and punctured so as to operate in the manner I have suggested, would affect that operation, or might affect it?

A. It might give to the performer the opportunity of adding what we call expression to the tones which the perforations allowed to be produced.

X Q. 50. That is, you conceive that a piece of paper might be rolled and otherwise manipulated into a form adapting it to operate as a musical instrument or means of producing musical tones, and at the same time have a musical composition presented upon it in the staff notation, so that the person using it for the purpose of producing the musical tones might at the same time use it to guide his mind as to the tones to be produced; do I correctly interpret you?

A. I am not quite sure of your question; perhaps I may answer this way. The Apollo rolls could perfectly well have the staff notation printed upon them to guide the musician in his management of the production of the music. If so, that would be to duplicate a part of the notation by the staff which is already presented by the perforations. Does that answer your question?

X Q. 51. My question was intended to express my understanding of your previous answer, or the sense to which it pointed. In the case you suggest or suppose, the notation in the staff form on the perforated roll would have nothing to do in producing the tone, would it?

74 A. It would help the performer to properly produce the tone.

X Q. 52. In the case, I suppose, of the sheet on which music was presented in the staff notation, such sheet being rolled and otherwise mechanically adapted to operate as an instrument capable of producing musical tones, such as a flute or fife would produce, the shape of the device when thus mechanically adapted, that is, its tubular form, for example, the perforations by which it might be adapted to produce tones of different pitch with proper manipulation by the

performer, and any other mechanical features which might be appended for like purpose, would not in any respect correspond to a musical notation, would they?

A. Certainly they would. I cannot conceive a roll perforated to produce tones in orderly succession of a musical composition which would not itself be a notation of that composition more or less perfect, that this notation actually helps in the production of the music would make it no less a notation and worthy of the protection due to a notation.

X Q. 53. Evidently you have misapprehended my question. Do you consider the term "musical notation" broad enough in meaning to include the manual of a keyed instrument whose keys are arranged in orderly succession for the purpose of producing tones, or the apertures of a fife or flute arranged at proper distances along the length of the instrument for a like purpose, or the frets of a stringed instrument which have an analogous purpose?

A. No; an instrument is not a composition, neither is an alphabet a sentence.

X Q 54. Now, if my questions misled you, let me restate them somewhat differently. If you should take a sheet of music, using the term in the common sense as being a sheet of paper having imprinted upon it a succession of characters presenting a musical composition in the ordinary staff notation, and should roll that
75 sheet of paper thus imprinted into a tube and perforate it at proper points in the length of the tube to make it have some of the characteristics of a fife or flute, otherwise manipulating it mechanically, perhaps, if necessary, for a like purpose, so that it will become in a crude sort of way a musical instrument: Is there any relation between the properties it possesses as a musical instrument and the musical notation written upon it; or, if the performer should produce by means of it the musical composition which was notated upon it, would the presence or absence of that musical notation on the sheet of paper thus rolled up into a musical instrument tend to make the production of the music by means of it any more or any less perfect?

A. You ask me two questions. To the first I would reply that a sheet of paper as the material upon which a notation is written, and the same sheet of paper made into a crude musical instrument, is serving two distinct purposes, but if the notation upon that paper is an aid to the performance of that music upon the instrument thus made, these two purposes are brought together, and the performer is enabled to make use of both. That he can use the paper as a musical instrument does not invalidate it as a vehicle of notation.

X Q. 55. In the use of the perforated rolls with the automatic players for which they are designed, what guidance, if any, or instruction, does the performer obtain for the purpose of rendering the reproduction of the music by the instrument more perfect or more strictly in accordance with the composer's thought by what he sees of the perforated roll as it comes into sight during the action of the machine, apart from any words or symbols which may be imprinted upon it; that is, what such instruction or guidance does he get from

the perforations themselves, which constitute, as I understand
76 you, according to your view, a system of notation expressive of the musical composition?

A. The skillful player gets a very great deal of assistance from the perforations which present the pitch and the length of the sound in the Aeolian. I cannot say in regard to the Apollo or other instruments using perforated rolls, since I have not operated them, but in the Aeolian a good player reads the perforations just as he would read the notes upon a staff, and knows, therefore, how to make those insensible changes which produce the finer grades of interpretation with which every musician is compelled to supplement the printed record. Thus, the very form of a melody will suggest slight gradations of rapidity and accentuation that are not put down by what are called expression marks, either upon staff notation or upon the Aeolian roll. It would be far less possible to make an artistic rendering of a composition if the player could not first see the notation by the perforations.

X Q. 56. So far as I understand you, then, instruction which the sight of the perforated roll gives the performer is one which appeals, not to his knowledge of any system of notation, but to his sense of fitness in respect to the musical composition; that is, his musical judgment determines the expression and rapidity as he apprehends the trend of the composition from the pitch and relative lengths of the note or other features which together give to the particular part of the composition under consideration its character and color? Is that correct?

A. Musical judgment has to supplement every kind of notation. The notation, however, is necessary as a basis of judgment. You can't hail a trolley car after it has gone by.

X Q. 57. In the absence of any expression mark or tempo mark on the perforated sheet, as I understand you, the musician of
77 good judgment would anticipate the proper expression and speed from what he might see in advance of the point of actual production on the perforated sheet; is that your meaning?

A. Just the same as he would do with a piece of music printed upon a staff notation, without marks of expression or tempo marks, and there are many such.

X Q. 58. So far as the musical composition consists of a succession of tones of different pitch and different lengths of duration, or a simultaneous production of tones of different pitch and succession of chords, in the production of the music affected by the fact that the person who is sitting in front of the instrument and furnishing the motive power can see the perforations which correspond by their position and length to the pitch and duration of the several tones?

A. Very much; the same perforations, if I were to run the roll through the Aeolian with my eyes shut, would yield a very different musical result to you from that which it might if, with my eyes open, I followed the course of the perforations and made use of the means of regulating time and volume of tone, at my command.

X Q. 59. I intended my question to eliminate questions of expressions and speed?

A. But they cannot be eliminated.

X Q. 60. ——from consideration. I will repeat it in substance. Does the sight of the perforations as they pass up to and over the mouthpiece have any effect upon the pitch of the tones which are produced by their passage over the mouthpiece, or can the operator, by seeing and knowing them, cause them to produce a different pitch from that which would have been produced if he had not seen them, or if he did not know to what pitch the perforations respectively corresponded?

A. It has no more effect upon the pitch which the perfora-
78 tions will give than the sight of the staff notation would have upon the pitch which his fingers would cause to be created.

X Q. 61. Does not the sight of the staff notation determine, or is it not intended to determine, the note of the instrument which the operator will strike and the pitch of the tone which he will thereby produce?

A. Certainly, but his production of it has nothing to do with it as notation. If the instrument is out of tune, he cannot forbid an alteration of pitch nor can the perforated roll.

X Q. 62. As a notation, therefore, the perforation does not determine anything which the performer may do to control the pitch of the note which shall be sounded at the time the perforation passes?

A. No, sir; neither does the staff notation. He may fulfill a staff notation by correctly performing its significance; he may fulfill the perforation by continuing to manipulate the levers which furnish power to the instrument. That is all.

X Q. 63. Does your position or opinion to the effect that the perforations in the perforated rolls employed to control the operation of such an instrument as the Pianola or the Apollo, constitute a system of notation, involve or rest upon the denial of any property or function in the symbols in an ordinary staff notation to determine what the performer may do to control the pitch of the notes which shall be sounded by the instrument which he is playing as he reads and follows the notation?

A. In a keyboard instrument, if he follows the notation, he cannot control the pitch; the pitch is determined by the notation. If he refuses or is unable to follow the notation, he may make error in the pitch; the perforation has the distinct advantage that it makes no such error.

X Q. 64. Assuming that the keyboard instrument is properly constructed, and that the notation corresponds to it, would
79 you not consider that the operator controlled the pitch when he selected the key to be struck whose pitch is fixed by the construction of the instrument?

A. That seems to me the vital point. He can refuse to play the note, or may play by accident the wrong note, in so far forth he refuses to follow the notation; that is, he may be a bad performer, but interpretation of music means good performance, and assumes that the notation is accurately followed. When the performer decides to perform correctly, he shifts the responsibility for the pitch to the notation.

X Q. 65. You will admit, I presume, that a given perforation in the perforated roll will produce a sound of the same pitch whether

the performer knows in advance what pitch it corresponds to or not?

A. Undoubtedly. Just as many uncultivated piano players do not know beforehand what the sound produced by pressing a given key will be until they hear it.

X Q. 66. And the key that is struck on a piano by the action of the Pianola or Apollo upon the passing of a given perforation, is just the same key whether the performer knows what key corresponds to the perforation or not?

A. Doubtless.

X Q. 67. Can you say the same with regard to the staff notation; that is, that the key to be struck will be just the same whether the performer knows what key is indicated by the notation or not?

A. Certainly not. One who performs upon the keyboard must understand the keyboard to use it rightly.

X Q. 68. Barring the variation of speed for purposes of expression it is equally true, is it not, that the duration of the several notes will correspond to the length of the perforations respectively
80 just the same whether the performer knows the length of those perforations or not?

A. Barring expression, certainly. It is definitely in the line of expression that the perforations assist the Pianola player when he sees them.

X Q. 69. And it is in respect to the capacity or adaptation of the perforated sheet to guide the performer in respect to expression, including in this term both variations of volume and variations of rapidity, that you regard the perforated sheet when used in the machine in the manner it is intended to be used, as performing the same function of instructing the performer as is performed by the ordinary staff notation?

A. Yes.

X Q. 70. In the other two respects in which the ordinary staff notation instructs the performer, that is, succession of pitch and the relative duration or length of successive tones, the perforated sheet controls the production of the music, irrespective of any instruction to the performer, does it not?

A. That is the artistic advantage of it. In other words, it is a notation plus a second performer, if you will, just as until recently church organs frequently required a second performer to pull the stops and do those things which the marvellous perfection of modern organs have effected by mechanical means.

X Q. 71. I understand that you regard perforated music rolls such as we have been considering, as a form of musical notation which can be read and serve as a guide to a performer through the eye in the same manner and practically to the same extent, as the ordinary form of staff notation, and that you are yourself able thus to read it. I hand you now a perforated roll bearing the imprint of the Q. R. S. Company, 1662, "Rhapsodie Hongroise, by Liszt." I ask you first whether you are familiar with the musical composition bearing that title?

81 A. I have heard it, but have no definite remembrance of it.

X Q. 72. Would you undertake, to commence at any arbitrary point where I have marked opposite the syllable "Cres." a line and the letter "A" on this perforated roll, to read the musical composition presented by the perforations, and to reproduce it in the ordinary form of notation?

A. Not without a few days of practice in such reading. It would take any man considerable time to learn to read any new notation, and it would take me less time to learn to read this notation than it would any notation with which I am not now familiar, but of which I have heard, since I am somewhat familiar with the appearance of this notation, although I have made no attempts to practice the reading of it apart from the performance upon an Orchestrelle.

X Q. 73. How long have you been using instruments in which these perforated rolls are employed, such as the Orchestrelle or any other of that general class?

A. For three or four years.

X Q. 74. How frequently do you use them, or have you been using them during that time?

A. During the college semesters three or four times a week.

X Q. 75. For several classes a day, or for only one?

A. One, or at most two.

X Q. 76. From your experience with these perforated rolls, using them in the players or automatic instruments to which they pertain, would you judge that the ordinary use of them in the manner in which they are made to be used would result in ability to read them as a system notation without special study being made of them for that purpose?

82 A. One could for a long time neglect the accurate reading of pitch and length while the general characteristics of pitch and length must be read.

X Q. 77. You used these instruments as an instructor. I understand?

A. Certainly.

X Q. 78. Your habit as instructor would tend to make you observe more accurately than the ordinary user of an instrument of this sort, would it not?

A. Not as to pitch and time, for the necessity of my instruction compelled me to have so many things in mind as to what shall be said in regard to the music to my class, both during and before and after performance, that everything possibly negligible I should neglect to observe, that is, I leave to the instrument to give me all of the mechanical aid that it possibly can, and put my mind upon the rest.

X Q. 79. You never bought any perforated music for the purpose of reading it as a musical notation, did you?

A. Certainly not.

X Q. 80. Did you ever hear of anybody doing that?

A. Again, certainly not. I use the music mostly of orchestral works; when I wish to study a notation, I prefer to study it in the orchestral scores, because it gives to me details which neither a piano

transcription nor an organ transcription nor an Aeolian roll would offer.

X Q. 81. Does the same explanation account for the emphasis in your negative answer to the question in regard to such purchase by others than yourself?

A. No; ignorance of what others purchase accounts for that. I know of few people who use the Orchestrelle, or Pianola, though I understand it is widely used.

Deposition closed.
Signature waived.

83 LEONARD B. MCWHOOD, being called as a witness on behalf of complainant, being duly sworn, testified as follows:

Direct examination by Mr. RAEGENER:

Q. 1. Please state your name, age, residence and occupation?

A. Leonard B. McWhood; age, 32; residence, New York City; occupation, instructor in music at Columbia University and Vassar College.

Q. 2. In the absence of Professor McDowell, the professor of music at Columbia University, are you in charge of the musical department of the university?

A. Yes.

Q. 3. What is the object of musical notation?

A. There are two objects: first, to afford a means of making a definite record of a musical composition, and, second, to furnish a basis for its performance.

Q. 4. Do the two perforated rolls Little Cotton Dolly and Kentucky Babe accomplish these objects?

A. Yes, and so would all similar perforated rolls.

Q. 5. Is the system of staff notation the only system?

A. No; during the development of the art of music numerous systems of notations have been in use, and there are several systems at present in use, and a new system might be invented at any time. All these various systems fulfill the dual requirement of musical notation, as mentioned above.

Q. 6. Please compare the system of staff notation with the notation used upon these perforated rolls as to their efficiency as records of musical compositions and as bases for reproducing or performing the musical composition?

A. Their efficiency is the same.

Q. 7. Can a perforated roll be read?

A. Yes, by one accustomed to it.

84 Q. 8. Can you read a perforated roll, and have you done so?

A. With my exceedingly limited experience in the matter, I can already, to a certain extent, read a perforated roll at sight. In fact, a few days ago I picked up in the house of a friend a perforated roll record of a musical composition, not knowing what the composition was, and as it afterward proved, not even being familiar with the composition. I read over the opening measures of the perforated

roll record, and from this record alone played the beginning of the piece note for note in all parts of the piano. After this, I played the composition for the first time on the Pianola, and it was precisely as I had already played it with my hands on the piano.

Q. 9. Was this a very difficult feat or, in your opinion, can it be readily performed by others?

A. I do not consider the feat difficult; any musician should be able to do the same thing.

Q. 10. Then I take it that with a record of a musical composition, whatever the form of notation may be, so long as the musician can decipher it, it is an easy task for the musician to make a different record of that same musical composition in one or more of the forms of notation with which most of us at the present time are familiar?

A. Naturally, a musician under these circumstances would be able to make a new record of the composition with any other system of notation.

Q. 11. Besides the hands, are other parts of the body used in playing musical instruments?

A. Yes; the nose, the mouth, the feet and other portions of the body have been used in playing musical instruments, and are still so used. For instance, the flute was originally played with the nose; many instruments are played with the mouth, the harp is played partially with the feet; other cases might be mentioned. In
85 fact, some instruments are played in which the hands are entirely subsidiary in the performance, such as the natural horn and trumpet, in which the hands serve merely to hold the instrument in position and have nothing whatever to do with the production of the tone.

Q. 12. Does the use of a perforated roll as a portion of the instrument in which it is played vitiate its value as a musical notation?

A. Not in any way, nor to any extent. A piece of sheet music might be thrust into an organ pipe in order to tune it, and in this way become an essential and indispensable part of the mechanism of the instrument, and yet the value of the piece of sheet music as a record of a musical composition would not be impaired. The same principle holds, as I have said, in connection with a perforated roll.

Q. 13. Printed sheet music is commonly referred to as music, and since these perforated rolls have gone into extensive use, is it not a fact that they are likewise commonly referred to as music?

A. Yes, in a popular sense. I think I may have used the word myself in that way, and I have seen it printed in that sense.

Q. 14. You heard the musical composition of Guilmant played with the Pianola; you never heard it before, and I want to know whether you were able to read the roll as it was unrolled on the Pianola?

A. Yes, to some extent, with more time I might have read it completely.

Q. 15. You stated that you have not been familiar with these perforated roll records for a long period; please state what familiarity, if any, you have had with them, and for how long a period?

A. I first became familiar with them at the home of the friend al-

ready referred to a year or two ago. Since that time I have
86 heard them used and used them in the regular course of instruction at Vassar College.

Q. 16. What kind of musical compositions have you rendered or caused to be rendered by means of these perforated roll records when giving instruction at Vassar College?

A. The compositions of some Mediæval contrapuntists. I have heard Professor Gow, in his classes at Vassar College, play on the Orchestrelle compositions from many of the masters of music.

Adjourned to December 31, 1902.

NEW YORK, *December* 31, 1902—2 p. m.

Met pursuant to adjournment.
Present: Counsel as before.

LEONARD B. MCWHOOD, resumed.

Cross-examination by Mr. BURTON:

X Q. 17. Referring to your answer to Q. 3 will you explain just what you mean by the phrase "to furnish a basis for its performance"?

A. I mean to furnish a basis for the reproduction of the musical composition either by the composer or by some one else.

X Q. 18. Now, will you further explain what you mean by furnishing a basis, particularly will you indicate whether you mean furnish information by which the music might be reproduced, or something else?

A. What I mean is to furnish a definite record such that from it the musical composition can be accurately produced.

X Q. 19. By "produced" do you mean made audible?

87 A. That was the idea that I had in mind; at the same time your question brings to mind the fact that the word "produced" might be used so as to include a mental reproduction of the composition by one reading the score.

X Q. 20. Then I take it you mean to include in your phrase "furnish a basis for its performance," providing means for conveying the musical thought from the record itself to the ear or mind of the person who might be f...nished with this so-called record?

A. I should prefer to use the word "basis" rather than the word "means" which you employ in your question. The word "means" does not indicate exactly what I intend. I mean that musical notation enables a composer to make a record of a musical composition such that from it his musical conception may be apprehended either by one able to read the score or by one that might hear the composition played in accordance with the score.

X Q. 21. As I now understand you, the "basis for its performance," as you use that phrase in your answer to Q. 3, must in any event be something which can be read by some one, since the musical conception is to be apprehended from it, either by the person who can thus read it, thus deriving the conception primarily from

the so-called record, or by some one who hears it performed by the one who can thus derive it primarily. Do you intend to thus limit the phrase?

A. No; it is not necessary that a record of a musical composition should be legible to the eye, although, as a matter of fact, all systems of notation of which I know, including that of perforated roll records, are legible to the eye. At the same time, if a record were made of a composition such that it would not be legible to the eye, but such that it would furnish a basis for the production or reproduction of the composition, it would still be a form of musical notation.

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X Q. 22. In your answer to X Q. 20, do you use the phrase "musical notation" in the sense of system of musical notation, or in the sense in which it is used in Q. 3, as interpreted by your answer to that question?

A. I used the words "musical notation" in the answer referred to in its generic sense, not referring to any one system, but covering each and all systems.

X Q. 23. Would any expedient which accomplished the two objects mentioned in your answer to Q. 3 be a musical notation or a system of musical notation?

A. I do not know exactly what you mean by the word "expedient."

X Q. 24. I will define that word as nearly as I can for the purpose, as a method or means contrived for a purpose. Can you answer the question with this definition?

A. I am sorry not to answer your question directly. I should judge rather each particular "expedient" by itself.

X Q. 25. Do you consider the furrow traced on the graphophone roll by the point of the recorder a notation of the musical composition the performance of which causes the recorder to trace that particular furrow?

A. Yes.

X Q. 26. Do you regard the cylinders of so-called music boxes having minute pins projecting from their surfaces for the purpose of impinging upon the sounding reeds as musical notations of the particular compositions which are produced by these "music boxes?"

A. Yes.

X Q. 27. Considering the fact that a different reed plate placed in registration or co-operation with the roll with its pins would cause the roll to produce a different audible result, would you not have to include the reed plate with the cylinder to make up the complete musical notation?

89

Mr. BROWNE: The accuracy of the alleged statement of fact as to the reed plate is controverted, and the attention of examining counsel is further called to the fact that this witness is not offered as a mechanical expert.

A. No. The cylinder of which you speak would be a form of musical notation if it were never played at all.

X Q. 28. You are familiar with the discs that rotate about their

center and by means of projections or recesses or irregularities in some form cause sounding devices to operate to produce music audibly; are such discs within your definition of a musical notation?

A. Yes, so far as I am familiar with them.

X Q. 29. I understand from your direct testimony that you can read the perforated roll so as to derive from it by eye knowledge of the musical composition, and that you could translate it into the ordinary staff notation. Will you undertake to illustrate this practically by making an ordinary staff notation of the perforated roll which I hand you marked "Defendant's Exhibit Perforated Roll No. 1?" You need not reproduce the entire roll, but, beginning at any point you please, indicate on the perforated roll the point at which you begin and close your reproduction into staff notation?

A. Before looking at the roll, I should like to say that in my direct testimony I specifically stated that my experience in this matter is exceedingly limited. My direct testimony will show, also, that even my acquaintance with perforated rolls is recent and comparatively small. It will show, also, that I implied that I
90 should require time to accomplish a feat such as the one you ask me to do; how much time I should require, I do not know. I do know that, as I testified, I have already read a portion of the perforated roll and played the music represented by it on the piano, without knowing the composition and without having any guide except the perforated roll record. Naturally, if the roll you hand me represents an intricate composition, or a composition such that the perforations on the record are comparatively irregular in their spacing, the task will be more difficult than otherwise, and might easily be so difficult as to make it impossible for me, with my present limited experience in this matter, to make a definite and exact reproduction of the composition in the staff system of notation without consuming considerable time. In my direct testimony I did not claim the ability to read any perforated roll at sight at the present time. I will now take in hand the roll you have offered me. I take it for granted that the present roll is constructed on a plan similar to that used in the Aeolian perforated rolls, with which I am slightly familiar. I am not at all familiar with the Apollo roll. In order to read the roll accurately, I ought to know exactly the number of different tones that can be represented on a roll with the breadth of this one, cut in accordance with the spacing employed in constructing this roll, and, in addition, I ought either to have enough experience to place the various perforations in their exact places within this possible range, or to have, in lieu of that experience, a rule or some other means of measuring the spacing accurately.

For the information of the witness, the examining counsel states that the spacing of the roll is identical with these cut for the Aeolian and Pianola; and that the number of notes in breadth of
91 the sheet is fifty-eight, and that there is an allowance in the width of the paper of three-eighths of an inch margin at each side.

The WITNESS: Please tell me also what is the lowest and the highest tone?

Counsel answers that he does not know where the player is customarily mounted with respect to the piano. The witness may assume any mounting which he knows is customary.

The WITNESS (continuing): Not knowing whether this roll represents an actual composition or a cacophonous combination of sounds, I have taken a rule, and, guided by this, and by the information regarding the spacing which you gave me, I have tried to ascertain the relationship among themselves of the opening notes. I have, therefore, been very slow in arriving at a result. I have not checked my work over again, and there may be errors in my computation. So far, however, as my survey went the opening notes seem to be as indicated in the accompanying score, assuming that the lowest tone within the range of the roll is the tone C. In connection with this score, I may add that, in order to save time, I have examined only the opening chords. On this account, I am unable without further examination of the following chords to determine the time of the various notes. There seems to be slight variations in the perforations which I shall disregard, considering them accidental. In doing this work, I have approached the task in a mathematical way, measuring off more or less accurately the spacings. That has been done in the effort to be exact; therefore, I have consumed a great deal of time on what I consider more or less of a thankless task. In the incident to which I have referred in my testimony, where I played a piece on the piano from a perforated roll record, I examined the record for about two or three minutes only, and in that time was able to read about two measures of the composition. Facility in this matter is entirely a question of practice, and I could easily train myself to efficiency if I gave the requisite attention to the matter.

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X Q. 30. How long a time did you require to ascertain the notes which you have written on the score apart from the time of writing and testing?

A. By the slow and laborious process which I employed, I took about twenty minutes.

X Q. 31. Do you think that it would be practicable for one to read a perforated roll of this sort without the assistance of measurement other than by eye, and without the aid of such conjecture as a musician would perhaps form from his knowledge of the proper succession of tones to produce a melody or proper conjunction of tones for harmony, that is, reading arbitrarily or rigidly as one would read the notes upon the common staff whether they produced harmony or melody or not?

A. What do you mean by "practicable?"

X Q. 32. I mean possible for the purposes and with the results afforded by the ordinary staff notation or any other system designed and used to enable a musician to read and reproduce on an instrument or by the voice the tones represented as his eye follows the score?

A. I have no doubt that with sufficient training a person might be able to read the music from a perforated roll record with as much precision as he could from staff notation. It might take considerable training to do this. Of course, I, with my limited experience, am not in a position to state which of the two systems of notation referred to would afford the less difficulty to a student learning to read music by one or other of the systems. I should imagine,
93 without any basis in experience, that a reading knowledge of the staff notation would be more easily acquired than a reading knowledge of the perforated roll notation, but whether or not one is more difficult than the other, certainly it would be practicable for a person to read exactly from perforated roll records. This fact could be well shown in the case of a blind man, who could, in my opinion, learn to read a perforated roll record by touch, but outside the case of a blind man, the reading could be done by sight if the reader only had the requisite training.

X Q. 33. Have you any means of forming an opinion, and if so, what is your opinion, as to the length of time it would require to give one the requisite training?

A. I have no idea of the time that would be required; the time would, of course, differ in various cases. With regard to a preceding question, I may state that in the reading of music from staff notation, a musician often depends upon his knowledge of music to assist the eye.

X Q. 34. I understand that you have not undertaken to read this perforated roll by eye at all, but only to translate it by measurement to the extent of the opening notes. Will you state whether you can read it by eye to any extent, or with any certainty of being right?

A. If the opening three tones were given to me as a starting point, I should be able at least to approximate some of the following tones. I consider the roll in question a difficult one to read, and it is, of course, more difficult for me than it would be for a person who is more experienced in this matter.

The score written by the witness reproducing the opening tones of the perforated roll is put in evidence and marked "Defendant's Exhibit McWood Translation," and has written upon it
94 signed by him the following; in addition to the said notes: "These last notes are not all of same duration. In order to save time, I have gone no farther. In looking at this copy, I see that in the second chord I have F#, G# and A#, although the perforations are as I now see, not equidistant."

Redirect by Mr. RAEGENER:

R. D. Q. 35. Do you wish to make any explanation with respect to your record written from the roll?

A. What I should like to say is explained in the following note which I have appended on the manuscript: "Later: I see that I read or calculated the music from the roll with the roll inverted; consequently the entire score is inverted. I consider C the lowest tone and A four octaves and a major sixth higher the highest tone. If

my measurements have been exact and if I made no error in computation, the correct chords can be obtained from what I have written by making the proper inversion."

Deposition closed.
Signature waived.

ADAM GEIBEL, a witness called on behalf of the complainant, being duly sworn, deposes and says as follows:

Direct examination by Mr. RAEGENER:

Q. 1. What is your name, age, residence and occupation?

A. Adam Geibel; age, forty-seven; residence, Philadelphia, occupation, musical composer and publisher.

95 Q. 2. Have you ever been a teacher of music, and if so, when and where?

A. I have taught music for the past thirty years or thereabouts; I taught at the Pennsylvania Institution for the Instruction of the Blind for two years after my graduation from that school, from the fall of 1872 until some time in 1874; I then resigned my position at that school, but was called to another position in the same institution in the fall of 1884; from that time I taught piano, harmony and composition, sight-singing and the church organ for seventeen consecutive years; I have also given private instruction to persons with sight during the same period of thirty years.

Q. 3. I understand that ever since childhood you have been blind?

A. I lost my sight through an accident, or rather through the ignorance of a physician when I was but nine days old, and I have never recovered it.

Q. 4. A few moments ago I caused to be rendered a musical composition entitled "Kentucky Babe Schottische, Complainant's Exhibit No. 10," who is the author of that composition?

A. I most emphatically declare that I created the melody and harmony of this composition, and that it is as original in form and construction as any composition in this class may be.

Q. 5. You authorized the White-Smith Music Publishing Company under an arrangement with them to take a copyright upon this composition in their name, did you not?

A. I did.

Q. 6. You have likewise heard a musical composition entitled "Little Cotton Dolly, Complainant's Exhibit No. 10," and I ask you who composed this musical composition?

A. Little Cotton Dolly is a song, the music for which I
96 composed, both melody and harmony, and I claim that it is as original as Kentucky Babe in its way.

Q. 7. You authorized the complainant to take a copyright upon this composition in the name of the complainant?

A. I did.

Q. 8. Please tell the Court how you make or cause to be made a record of any of your original musical compositions?

A. I dictate every phrase which I compose and set together in musical form to an amanuensis. I call off the notes with their rythmical values and she transcribes them with pen and ink to paper. After I have dictated the entire composition it is played over for me on the piano, and in that way through the medium of a musical ear I can say whether it is correctly written or not.

Q. 9. What bearing in your judgment will the multiplication of instruments like the Apollo or Pianola have upon the ability of composers to obtain just compensation from the sale of records of their musical compositions?

A. If the multiplication of mechanical musical instruments continues to grow as it has grown during the last ten years it would seem to me that the time would not be far distant when there will be very little need of the ordinary engraved sheet music, as many people who never have studied the art of performing can, by means of these instruments, play from the perforated rolls, and if there is no protection to a composer the composer's living will be seriously lessened from a financial standpoint, as he is now receiving royalty or cash consideration for music that is published in the ordinary sheet form, and not from the makers of rolls of perforated music for mechanical instruments.

Cross-examination waived.
Signature waived.
Adjourned to January 2, 1903.

97 REGINALD DE KOVEN, a witness called on behalf of the complainant, being duly sworn, deposes and says as follows:

Direct examination by Mr. RAEGENER:

Q. 1. What is your name, age, residence and occupation?

A. Reginald De Koven; age, thirty-nine; residence, Washington, D. C.; occupation, musical composer.

Q. 2. Kindly name a few of your compositions?

A. Operas, Robin Hood, Rob Roy, Fencing Master, Highwayman, Foxy Quiller, Maid Marian, The Algerian, The Mandarin, and others, and about two hundred separate songs and other compositions.

Q. 3. Your operas have been performed a great many times, at various theatres?

A. Robin Hood has been performed in this country over 3,000 times, and most of the other operas have been given 1,000 or more times, all over the country.

Q. 4. What is a musical composition?

A. A musical composition is, so far as the public is concerned, the expression of a musical thought of a composer embodied in some kind of a permanent record.

Q. 5. In your opinion, does it make any difference whether such record is legible?

A. It does not; a composer might readily play or sing into a phonograph or some other mechanical recording instrument and

obtain a record which would form the composition and give it the lasting quality necessary.

Q. 6. Having an accurate record of a musical composition, it is not a difficult task to make a record readily intelligible to persons familiar with staff notation?

98 A. Certainly not. The primary function of music in any case concerns the ear, and the composer in the first instance may be said to dictate to himself when transmitting to his music paper the sounds which he hears in his brain, and it is, therefore, a product primarily always of the ear and not of the eye. The music of birds and of savage and primeval people that has never been noted has been at various times transcribed, and thus rendered generally available by competent musicians.

Q. 7. By the last part of your answer I take it that you mean to say that, although the music of primeval people was not notated, nevertheless such music consisted of musical compositions?

A. Certainly, although notation was lacking, the same sequences of vocal sounds were transmitted intact from generation to generation, and a very marked instance of this fact may be found in the case of the Spanish melodies now so well known; many of them were not transcribed at all until the end of the eighteenth century, but had been in existence in Spain and in use among the people previous to that time for centuries.

Q. 8. I show you the defendant's perforated music roll, and I take it that you agree with me that a skilled musician cannot readily read the same, but with a little patience and application he can learn to read this form of notation just as he can learn any other form of notation?

A. Certainly.

Q. 9. What bearing, in your judgment, will the multiplication of instruments like the Apollo and the Pianola have upon the ability of composers to obtain just compensation from the sale of record of their musical compositions?

A. A very important bearing. I have felt for some years past, in view of the large sale of records of my composition- made by the various companies manufacturing them, has been a distinct

99 financial loss to me, and it is quite conceivable that as time goes on, as the popularity of these instruments seems on the increase, that the sale of sheet music, whereby now alone the composer receives remuneration for his compositions, will be so seriously interfered with as to decidedly lessen his possible royalty. It seems to me that the injustice to the composer in thus absolutely selling the fruit of his brain without advantage to him is so manifest as to hardly need discussion. Whether the composer's thought is recorded on a phonograph, in sheet music or on a self-playing instrument, seems to me to make no difference as to his rights in receiving compensation for his work, which under one form of record is granted him by statute. It is quite conceivable that, as the notation of the music rolls used in these instruments is by no means recondite, and could be readily acquired by a trained musician within

a comparatively short time, that musicians and composers might be forced through the falling off of the sales of the sheet music from which now alone they receive compensation, to learn the notation and write their music on these perforated rolls, and if then these rolls could be sold without royalty, the *reductio ad absurdum* of the whole proposition would be manifest to everybody. The question of the general legibility of a music record forming a musical composition is outside of the question altogether; as the law now stands I, or any other composer, may take a composition written for piano or any other instrument and arrange it for such an orchestra of recondite instruments, so that the record would not be legible or even intelligible to one man in a thousand, and yet my copyright and rights in such an arrangement or reproduction would not be impaired. Why, therefore, should the question of the reading of the perforated rolls, whereby in exactly the same way as in sheet music, the author or composer's thought is conveyed to the public,
100 not be allowed to bring any proper compensation to the composer? The whole idea is manifestly unjust and inequitable.

Mr. BURTON: The substance of this witness' testimony being argument which is wholly immaterial, he will not be cross-examined, and all of the witness' last answer is objected to as incompetent and irrelevant; first, as being an opinion as to possible future events; and, second, as merely an opinion on a question of equity or ethical propriety.

Signature waived.

NEW YORK, *January* 2, 1903.

Met pursuant to adjournment.

Present: Counsel as before.

JAMES H. WHITE, called as a witness on behalf of complainant, being duly sworn, testified as follows:

Direct examination by Mr. RAEGENER:

Q. 1. Please state your name, age, residence and occupation?

A. James H. White; age, 55; residence, Meriden, Conn.; occupation, manufacturer of musical instruments. I am president and treasurer of the Wilcox & White Company of that city.

Q. 2. What is the business of the concern last referred to; what do they manufacture?

A. Musical instruments, largely in the line of so-called self-playing instruments.

Q. 3. How long have you been engaged in the business of making and selling musical instruments?

101 A. Since 1877, and prior to that as far back as 1866 I was in the employ of the Estey Company, bringing me in contact with manufacturers of musical instruments daily.

Q. 4. About how many instruments such as the Apollo, Aeolian, Angelus and Pianola are in use to-day in the United States?

A. I should say a fair estimate would be from seventy to seventy-five thousand.

Q. 5. About how many perforated roll records do you estimate were made in this country during the year just passed?

A. In the neighborhood of from one million to a million and a half.

Q. 6. About what is the average price of instruments like the Pianola, Apollo, Angelus, Aeriol and Orchestrelle?

A. So-called piano players will average about $250, and instruments of the other type, such as the Orchestrelle, Aeriol, Symphony, will range from $800 to $3,000, according to style, combination of reeds, etc.

Q. 7. To what extent has this industry, referring to the instruments mentioned in the last question, increased during the last few years?

A. The business has increased very rapidly since the first incipiency of these instruments; in 1888 they were hardly known, and the business has been very rapidly increasing and doubling from year to year since. In fact, the past year of 1902 has more than doubled the sales, in my opinion, of the previous year.

Q. 8. About what price are these perforated roll records sold at retail?

A. They range from a dollar to three dollars, according to the size of the roll.

Q. 9. Please explain the system of circulating libraries, existing in very many cities in connection with the perforated roll records?.

102 A. The idea of the circulating library, so-called, is for the purpose of enabling a purchaser of an instrument to have free access to all the entire catalogue of music rolls for operation upon their instrument, and for the sum of from twenty to thirty dollars annually gives the purchaser the privilege of taking twelve rolls every two weeks, returning them for new rolls, thereby they have all of the finest music it is possible to hear upon the instrument.

Q. 10. These perforated roll records, or many of them, may be used upon or in connection with a number of instruments; for instance, I believe that the rolls used in the Aeolian may be used in the Pianola and the Aeriol?

A. Yes, they can.

Q. 11. Will you describe in a general way the character of the musical composition notated upon these perforated roll records?

A. The character of music of the so-called perforated music sheet embraces all classes of music—sacred, popular, dance, classical, operatic; in fact, every known class published by the regular music publishers in sheet form.

Q. 12. In view of the rapid multiplication of these self-players, how are the composers of musical compositions affected, in your judgment?

A. As far as any remuneration is concerned, if that is what you mean, they have not received any recompense whatever, in my judgment or opinion, or to my knowledge.

Q. 13. State whether or not, to your knowledge, the perforated roll music is or is about to be sold by dealers in sheet music, so-called, and side by side therewith?

A. There is no doubt in my mind but what it will be sold by dealers in sheet music, so-called, and within a very short time, as I have recently seen letters soliciting trade from music sellers
103 and to put in a line of perforated music to sell in conjunction with their sheet music.

Q. 14. There is a concern called the Perforated Music Roll Company that is exclusively engaged in the manufacture of perforated roll records for the trade generally, and not for any specific self-player, and I understand that this concern does not manufacture self-players or any musical instruments?

A. You are correct; there is such a concern known as the Perforated Music Roll Company, who manufacture perforated music for the general trade, or who are soliciting business from manufacturers of piano players and other instruments of like class, but who do not themselves manufacture any musical instruments whatever.

Cross-examination by Mr. BURTON:

X Q. 15. How much earlier than 1888 to your recollection were instruments using perforated sheets to control the production of the musical tones known in this country?

A. Probably about twenty years prior to 1888.

X Q. 16. Were not instruments of this general class introduced in use to a considerable extent, so that the perforated sheets for controlling them were familiar to the trade as early as 1886?

A. Yes, in a very small way, a very few instruments only being made at that time.

X Q. 17. They had attracted wide attention and become quite generally familiar at 1890, had they not?

A. Yes, but the instruments at that time were very crude as compared with those of present manufacture, and were therefore not as satisfactory and as much sought after as they are at the present day.

X Q. 18. The instruments made by that time used the flexible or thin paper for perforation to make the perforated rolls,
104 according to practically the same method and principle as those that are now almost universally used, did they not?

A. The general character of the paper used for the perforated music is about the same as at that time, but of course improvements have been made in this, as in everything else; the principle, however, is the same.

X Q. 19. The rolls were removable interchangeable, that is, so as for any piece that one desired to play the proper roll could be substituted for any roll that might have been before on the instrument?

A. The catalogue of perforated music at that time was very limited, but any roll shown in the catalogue could readily be used to operate the instrument and produce the effect desired.

Redirect examination by Mr. RAEGENER:

R. D. Q. 20. Will you kindly compare the self-playing instruments of to-day with those in existence in 1888, with regard to their efficiency in the production of artistic and otherwise pleasing musical effects?

A. There is really no comparison. In the former days, the instruments would merely produce sound, and it was almost impossible, or practically so, to obtain musical expression. During the past few years ingenious devices have appeared to enable the operator or performer upon the instrument to obtain artistic musical expression of the highest order, which did not appear in the early days.

Recross-examination by Mr. BURTON:

R. X Q. 21. These improvements which you speak of enabling the performer to get musical expression in addition to the mere tone, have been improvements in the construction of the instruments apart from the perforated sheets, have they not?

A. Improvements have been made in the perforated sheets and also in the instrument.

105 R. X Q. 22. Have the improvements in the perforated sheets been anything more than mechanical; that is, changes increasing their accuracy?

A. Well, there are additions to them which did not appear in former days.

R. X Q. 23. Please mention some of these additions?

A. Expression characters to enable the performer or to indicate to him the manner in which the selection should be properly rendered. These expression marks would also embrace the tempo or time intended by the composer. Also, for the proper phrasing, which has all been introduced within the past year or two.

R. X Q. 24. Then, so far as these features that you have mentioned, may not be present in any particular perforated music now produced, such perforated music, except as it might be more accurately cut, would not in itself and apart from the improvements in the instrument on which it was to be used, be any advance over that which was made in the early years you have referred to?

A. Probably not.

Re-redirect by Mr. RAEGENER:

R. R. D. Q. 25. But, to your knowledge, how general is the use at present of perforated music provided with the expression, tempo and other indications mentioned by you?

Objected to as incompetent and irrelevant.

A. It is in almost universal use.

Deposition closed.

106 The witness WHITE recalled:

Q. Please produce the letter referred to in your prior answer?
A. I do; here it is.

The letter and accompanying pamphlet produced is offered in evidence, and marked "Complainant's Exhibit Letter from the Perforated Music Roll Company, and Pamphlet from the Perforated Music Roll Company."

Objected to as incompetent and irrelevant.

Signature waived.

HENRY T. FINCK, a witness called on behalf of complainant, having first been duly sworn, testifies as follows:

Q. 1. What is your name, age, residence and occupation?
A. Henry T. Finck; age, forty-eight; residence, 485 Manhattan avenue, New York City; occupation, editor and author.
Q. 2. With what newspaper are you connected and in what capacity?
A. I am the musical critic of the New York "Evening Post" and have been for twenty-one years.
Q. 3. What are your duties as musical critic of this newspaper?
A. Attending concerts and operas and writing about them.
Q. 4. I understand that you are the author of some books? Please name them.
A. I have written several books on musical subjects; one on the life and works of Richard Wagner, one a collection of essays
107 called "Chopin and Other Musical Essays," one "Paderewski and His Art," and another on "Songs and Song Writers."
Q. 5. How long have you been familiar with musical instruments in connection with which perforated roll records are used?
A. More than four years. I play on the Aeolian myself a good deal and so do the other members of my family.
Q. 6. Can anyone obtain a musical education by the aid of these perforated roll records?
A. Yes. I know some cases in my own experience, one a relative of mine who knew very little about music before he began to play on our Aeolian and who could not sit through an opera—it bored him. Now he is an enthusiastic lover of all good music and interprets it correctly. At first he constantly made mistakes in the interpretation of the music, but familiarity with it, by constant playing of the Aeolian, has taught him to interpret it correctly now.
Q. 7. Then I take it that it requires some practice with instruments of this kind before one can interpret musical compositions in the shape of perforated roll records correctly?
A. It does require experience, and the better the musician the better he can play on it, just as on any other instrument.
Q. 8. This relative of yours to whom you have referred in the previous answer, does he play the piano?
A. No; he plays no musical instrument except the Aeolian.

Q. 9. What is a musical composition?

A. Music renderable by musical instruments or the human voice.

Q. 10. Is the rendition of a musical composition dependent upon any particular form of record or notation?

A. No; a great many different notations are possible and
108 have been in actual use at different times and are in use at the present day; and different records, for that matter, are likewise in use, ordinary sheet music being one form and these perforated roll records being another form, and I can readily conceive that other forms of records might be devised.

Q. 11. What influence has the multiplication of these instruments like the Aeolian, the Apollo and the Pianola upon the sale of the ordinary record of a musical composition, to wit, sheet music, with which we are most familiar?

A. It may become a serious competitor in the future. It is quite conceivable that in the course of a few years some authors and composers may make their first records of their musical compositions in the form of these perforated rolls, especially as by the aid of certain electrical attachments to the piano it is possible for a composer to record instantly his musical thoughts. I have seen such records made. They are perforated rolls and can be used upon instruments like the Pianola, Aeolian and Apollo. Great pianists often improvise wonderfully, and they may in future record such improvisations on these perforated rolls. These might be stolen, causing them great loss and damage if they were not copyrighted. Inasmuch as any musician can make a record in the staff notation by the aid of a perforated roll record which may be the only existing record of a musical composition, I see no reason why the laws should not consider a perforated roll record an infringement of copyrighted sheet music.

Q. 12. Is there any analogy between the copyright protection accorded to a book and that which ought to be accorded to a musical composition?

A. Yes; a book is a composition or arrangement of words. A musical composition is an arrangement of musical sounds.
109 In neither case is the monopoly confined to the notation or the characters making the notation, nor to the form of the record, be it a roll, a newspaper, a pamphlet, a calendar or a sheet, and the monopoly is not in the words or sounds standing alone, but only in the arrangement.

Q. 13. Can you tell me anything more as to the educational advantages of these perforated roll records?

A. They will do more than anything else that has ever been done for the popularization of the best music. At present it is only the cheapest and trashiest music that is universally popular, for the reason that good music must be heard a number of times before it can be appreciated. Now, these instruments with perforated rolls make it possible to play the most difficult and artistic music over and over again, and that will do as much ultimately for the popularization of good music as the printing-press did for the popularization of good literature. Most children are tortured for years with practice on the piano and have neither the time nor the talent to ever

become good musicians. These instruments do away with all this drudgery, which only makes them hate music, and makes them, on the contrary, love it as a pastime.

Complainant's counsel offers in evidence an extract from a newspaper called *The Newark Call*, under date of October 5, 1902, and the same is marked "Complainant's Exhibit Extract from the *Newark Call*."

Complainant's counsel also offers in evidence so much of page 661 of Drone on Copyright, published by Little, Brown & Co. in the year 1879, as commencing with "5 and 6 Vict., C. 45," to the bottom of the page; likewise the law of France entitled —— and likewise the recent Statute of the German Empire, passed the — day of ——.

110 NEW YORK, *January* 2, 1903—2.15 p. m.

HENRY T. FINCK, resumed:

The answer to Q. 11 is objected to as not responsive, and as incompetent and irrelevant, being merely a statement of the witness' opinion as to the probability of a future event. The extract from the *Newark Call* of October 5th, 1902, is objected to as incompetent. Same objection is made to page 661 of Drone on Copyright, to the law of France entitled —— and to the Statute of the German Empire passed the — day of ——.

Cross-examination by Mr. BURTON:

X Q. 14. Mr. Finck, does a skilled musician derive any satisfaction from playing an instrument in which he is skilled, beyond that which he derives through the ear in hearing the music which he produces on the instrument?

A. A musical expert can read printed scores and get a certain amount of pleasure. There is a satisfaction of showing off before others his skill, but in most cases I should think the torture of nervousness would counteract that.

X Q. 15. Then I take it that you think a skilled musician would derive more unalloyed satisfaction listening to an automatic reproduction of a piece of music by a mechanism which puts no strain upon his nerves, than he would from producing the music by his own skill on the piano for instance. Do you think so?

A. I think that the very best kind of a musician would get more pleasure from playing himself, but that others would probably get more pleasure from playing the automatic instrument.

111 X Q. 16. You mean that the person of only sufficient musical skill to perform on the piano, for example, well a simple piece of music, or indifferently a more difficult piece, or with difficulty and embarrassment a still more difficult one, would derive more satisfaction from hearing performed by an automatic mechanism the music which it was difficult for him to perform of his own skill?

A. Yes.

X Q. 17. How about the performance of music fully within the

skill of the performer; would the satisfaction of performance amount to anything in addition to the satisfaction of hearing the music?

A. Yes, particularly if he is playing for himself, because all exercise of the mental faculties is pleasurable, like exercise of the body when not too difficult.

X Q. 18. Then a person who has moderate skill on any instrument would find greater satisfaction in playing comparatively simple music on that instrument, in preference to merely listening to it, a person of greater skill would in like manner find a greater satisfaction in playing music correspondingly more difficult in preference to listening to it, and so on up to the most skilled musician, who would find the greatest satisfaction of all in playing the most difficult music still within his skill?

A. Yes.

X Q 19. Does the development and cultivation of musical taste and judgment tend to repress or diminish desire for skill in performance upon an instrument?

A. It tends to increase the desire.

X Q. 20. To what class of persons do the automatic musical instruments using perforated rolls appeal or cater; to the highly trained musician, or to those who are without the most complete training?

A. To all of them; to those who know no music at all,
112 they make it possible to play, and even to the experts it is both an instruction and a pleasure, because few are able to play the symphonies and the operas on any instrument except the automatic.

X Q. 21. You have expressed the opinion in your direct-examination, as I understand it, that the use of the automatic instrument of this class by those who at the commencement of such use were without developed musical taste and judgment, has the effect, as in the case of your relative whom you mention, to develop such musical taste and judgment, and fit them to appreciate and enjoy high class music which before they were unable to appreciate; do you wish to qualify that statement in any way, or do you still adhere to it?

A. I adhere to it.

X Q. 22. According to your observation and judgment, are parents who may have acquired or experienced cultivation of their musical taste by the use of automatic players less likely to desire their children to receive good musical training than if they, the parents, had not had their taste so cultivated?

A. I have had no experience in that matter.

X Q. 23. Since you have expressed some opinions upon questions of this sort, if you have an opinion on this point, you may express it, with your reasons?

A. Well, I think the parents of the future will discriminate; if they want their children to be professional musicans, they will get piano teachers as in the olden times, but if they simply want to teach them to learn to enjoy music without wasting years in learning to play it, they will choose the automatic instrument.

X Q. 24. Please define the word "interpret" as you used it in answer to Q. 6?

A. Anyone can play those automatic instruments without the slightest musical knowledge, but if they have no knowledge
113 at all, they will probaly play it incorrectly from beginning to end, too fast or too slow or too loud or too soft. Now, an interpreter differs from a mere player in that he not only plays the music but plays it correctly, with proper expression.

X Q. 25. Then I take it that by "interpreting" music, you mean playing it so as to express the feeling by the mode of execution?

A. Yes.

X Q. 26. Will one acquire ability thus to interpret music so as to be able to catch the various phases of a piece heard for the first time as it proceeds, or can one in this sense interpret a piece of music only in retrospect, or so as to give it the proper expression after having heard it once or oftener?

A. An expert musician will be able to interpret a simple piece like a waltz or a polonais, while he is playing it for the first time. A player who is less expert cannot do this, but for his guidance the expression marks are marked on the perforated roll record.

X Q. 27. In the absence of expression marks, or in the absence of knowledge of their meaning, which is the same thing, one whose musical taste and judgment was being cultivated by using an automatic player, would gradually acquire, I take it, the ability to grasp the musical sense of the composition which was being rendered as it came to his ear, so that in simple music he would in time, as the result of such practice, be able to adapt the expression as to loudness, softness and rapidity, to that musical sense the first time the piece was played by him; is that so?

A. If he has any gift for music, and, to a certain extent, because the expression in music is always more or less arbitrary, and
114 no two composers writing the same piece would probably have used exactly the same expression marks in it.

X Q. 28. The sense of what the proper expression should be, the player would derive as to each phrase or passage from the portion which he has heard giving him a sense of what the completion should be, so that he would shape his expression to that anticipation of the musical sense somewhat; this is my conjecture; is it correct?

A. To some extent, although the expression in the second section sometimes changes entirely.

X Q. 29. And in the absence of any marks indicating the expression intended or suggested by the composer the performer with the automatic player would really have to hear the section or passage through in order to form the judgment as to what the expression would be in such cases, would he?

A. Yes; to get the exact expression that the composer intended. An expert, however, might vary the expression without marring the piece at all.

X Q. 30. If automatic players, such as we are speaking of, continue to increase in general use at the present rapid rate, so that they become practically as universal as pianos and organs, make it possible for almost everyone to produce in their homes the highest class of music, do you think that the result will be a very large increase

in the number of persons whose musical taste and judgment will be developed and cultivated along the best lines?

A. I do, most certainly.

Deposition closed.

Signature waived.

115 NEW YORK, *January* 2, 1903.

WALDO S. PRATT, a witness called on behalf of complainant, being first duly sworn, testified as follows:

Direct examination by Mr. RAEGENER:

Q. 1. Please state your name, age, residence and occupation?

A. Waldo S. Pratt; age, 46; residence, Hartford, Connecticut; occupation, Professor, Hartford Theological Seminary.

Q. 2. Are you the author of any text books?

A. I have prepared a small manual of sight singing, and a music history.

Q. 3. Are you the Professor of Music at the Hartford Seminary?

A. I am.

Q. 4. I show you two perforated roll records of musical compositions, and ask you whether you are familiar with records of this kind?

A. I have seen them.

Q. 5. What function do these perforated roll records serve?

A. They seem to serve two purposes, one to make a record of a composition and the other to be inserted in a machine for the reproduction of the composition.

Q. 6. How is an author's composition made reproducable by others?

A. By some form of transcription or notation.

Q. 7. Are you familiar with various forms of notation?

A. Yes. The common form of notation besides the staff notation is the tonic sol-fa notation. The tonic sol-fa notation is in general use in England and somewhat in America.

Q. 8. Does ability to read either of these two systems of
116 notation necessarily involve ability to read the other?

A. No.

Q. 9. Are these perforations upon these perforated roll records a form of notation?

A. I don't see why not.

Q. 10. Can this form of notation be readily read?

A. It is not customary to read it, but I don't see any difficulty about reading it if it was necessary.

Q. 11. If the multiplication of these self-players continues as it has done for several years past, what effect will they have upon the sale of sheet music?

A. Well, I should suppose that they would diminish the sale of the sheet music.

Mr. BURTON: The question is objected to insofar as it calls for an opinion, and the answer is objected to as being solely an opinion

upon a probability of a future event, and therefore incompetent and irrelevant, and the same objection is now made to former questions and answers in this examination directed to the same point, since it appears intended to reiterate in the record such testimony, to wit: Q. 9 of the examination of Reginald De Koven, and the portion of the answer responsive thereto which includes to the end of the second sentence, which ends with the words "possibly royalty"; Q. 9 of deposition of Adam Geibel, and all of the answer thereto.

Q. 12. What do you think are the educational advantages obtained by the use of these perforated roll records?

117 A. Evidently they make it possible for those who do not sing or play to themselves produce musical compositions in which they are interested, and secondly, they enable those who do play to effect the performance of compositions which are otherwise not possible to be played.

Cross-examination by Mr. BURTON:

X Q. 13. By the phrase "produce musical compositions," you mean become composers?

A. No. As I look at it, there are at least three processes to be distinguished; first, composition proper; second, the record of such composition, and third, the reproduction of such composition in actual sounds. What I meant was the last.

Signature waived.

118 Circuit Court of the United States, Southern District of New York. In Equity.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

Testimony taken on behalf of complainant, pursuant to notice, under and pursuant to the 67th Rule of the Supreme Court, as amended, before William Cobb, Esq., Notary Public, Special Examiner, at the office of Alex. P. Browne, Esq., 31 State street, Boston, Mass., on Saturday, January 3, 1903, at 10.30 a. m.

Appearances.

Alex. P. Browne, Esq., and Louis C. Raegener, Esq., of Counsel for Complainant.

Charles S. Burton, Esq., and Edward S. Evarts, Esq., of Counsel for Defendant.

Deposition of John K. Paine.

Direct examination by ALEX. P. BROWNE, Esq.:

Q. 1. Please state your name?

A. John K. Paine.

Q. 2. Please state your place of residence and your profession.

A. Professor of Music at Harvard University, Cambridge, Mass.

Q. 3. About how long have you been connected with the University or Harvard College?

A. Forty-one years, nearly.

119 Q. 4. Please state whether or not, in the course of your instruction, you have made use of a so-called self-playing instrument, and if yes, please state what the name of the instrument is and the manner in which it has been used?

A. I have used an Aeolian in my lectures on the history of music, to illustrate the orchestral and choral works of the great masters. I have used it for the last three years, and found it very useful.

Q. 5. In the Aeolian, used by you, is a perforated music roll made use of?

A. Yes.

Q. 6. Now, with reference to such a roll, I will ask you whether or not, in your opinion, the perforations therein would be properly considered or termed a record or notation of a musical composition?

A. They are, in my opinion.

Q. 7. Please state whether or not, upon the perforated music rolls we are speaking of, there are also marks indicating changes of time, intensity of sound, etc., and to what extent you have found these marks of value as a guide to the interpretation of the musical composition recorded upon the roll?

A. I have found them indispensable.

Q. 8. In addition to your work at Harvard, please state briefly what musical compositions of your own have been widely and frequently performed in public?

A. My music to "Oedipus Tyrannus" of Sophocles and "Spring Symphony," "Opera of Azara," "Oratorio of St. Peter," "Symphonic Poem," called "Island Fantasy," cantatas "The Nativity" and "Phoebus Arise."

Cross-examination by CHARLES S. BURTON, Esq.:

X Q. 9. By the statement that you have found the marks indicating changes of time, intensity, etc., indispensable, do you
120 mean that without such marks you found it impossible to use the rolls on the Aeolian so as to get the proper expression and tempo?

A. The marks of expression in a musical composition are essential and are made by the composer, and they are a part of the composition, because the tempo, or time, and the dynamic effects of loud and soft, crescendo and diminuendo, are an indispensable means of enhancing the effect of the musical sounds.

X Q. 10. Wouldn't any musician skilled in the apprehension of musical composition interpret the composition by substantially the same expression and tempo of the different passages as the composer designed for those passages without any expression and tempo marks, that is to say, are not the expression and rate of movement inseparable incidents of the composition?

A. I should have to say no to that, because interpreters would

vary considerably in this respect, and that is the reason why the composer takes the utmost care to indicate by the signs the rate of movement and the dynamic effects of the music. Beethoven set the example of the nicest precision in this respect.

X Q. 11. Then, in the absence of any expression or tempo marks, you could not, in using the Aeolian with the perforated roll music, tell anything about the proper expression and tempo except as by playing the music through and hearing it and so gaining a conception of the musical sense, you became able yourself to act the part of a composer by deciding upon expression and tempo according to your own judgment in the different passages. Would that be a correct statement?

A. In the absence of expression marks, it is necessary for the interpreter to use his own judgment.

X Q. 12. How would he form his judgment?

121 A. He would form it by his musical feeling and æsthetic appreciation of the rhythm.

X Q. 13. In the use of the Aeolian with the perforated rolls, I suppose the performer would derive "musical feeling and æsthetic appreciation of the rhythm" upon hearing the music produced by running the roll through without regard to modifications of tempo or expression or with some arbitrary or conjectural tempo or expression, or how would he get the musical feeling and appreciation of the rhythm to guide him in respect to expression and tempo?

A. He would have to experiment with it. He would have to go over it and go over it, and then probably he would not get it according to the composer's idea exactly. There would be a wide difference, however, between what a skilful musician would do and an amateur.

X Q. 14. But either a skilled musician or an amateur would have to work out the expression and tempo by running the roll through the instrument, in order to get through the ear the proper understanding of the musical sense and exercise his musical judgment and taste in adapting the expression and tempo to that sense. Is that the fact as you view it?

A. All I can say is that we should have to play it over until we came to some conclusion on these points.

X Q. 15. Could you come to any conclusion at all if you could not hear the music as it was played by the Aeolian with the perforated roll?

A. No.

Redirect examination by Mr. BROWNE:

R. D. Q. 16. Have you ever considered the matter of the possibility of reading the perforated roll notation, or otherwise deciphering it so as to ascertain what the musical composition re-

122 corded upon it was?

A. No. But I can conceive of its being done successfully.

Signature waived.

BOSTON, *January* 3, 1903.

Deposition of Walter R. Spalding.

Direct examination by LOUIS C. RAEGENER, Esq.:

Q. 1. Please state your name, age, residence and occupation?

A. Walter R. Spalding, Assistant Professor of Music at Harvard University, Cambridge; age about forty.

Q. 2. Are you a composer of music?

A. I have composed, and some of my compositions have been published.

Q. 3. Do you use the Aeolian Orchestrelle, and, if so, for what purpose?

A. I use the Aeolian Orchestrelle on the average twice a week in connection with my lectures on musical form, and in connection with the analysis of standard compositions.

Q. 4. What advantage has such an instrument over the organ?

A. It combines mechanical accuracy, speed and clearness, at the same time; it is possible to repeat a composition over and over, and this is a great saving of strength, both mental and physical, for the performer.

Q. 5. What are the educational advantages of self-players, like the Aeolian?

A. The educational advantages are that they open up a much wider horizon, and enable the person with a natural love for
123 music, and with a certain aptitude therefor, to play over many more compositions, and to play them more often, than would be the case ordinarily if the person were limited to such instruments as the violin, pianoforte or organ.

Q. 6. What is the function of a notation in a record of musical composition?

A. A notation is a vehicle or carriage by which the imaginative thoughts of the composer are transmitted to the hearer in accordance with them. In my opinion, any form of musical notation has several functions. First, it is a record by means of which musical thoughts are to be preserved and identified. It is also a set of arbitrary symbols or hieroglyphics by which, by means of some instrument, these thoughts are to be transmitted through the human ear to any listener.

Q. 7. Is a perforated roll-record any less a record because it also happens to be part of an instrument?

A. By no means. All musical notation depends on certain arbitrary conventional symbols. I consider that with slight practice I could understand and follow the thoughts of a composer from the perforations in a music roll with more ease than I can decipher certain musical notations which have actually been used in the historical development of music.

Q. 8. Is a musical composition intended for the eye or for the ear?

A. A musical composition is intended for the ear. Its final effect is produced when it is heard. It is understood from my previous

answer that the eye plays an important part, but only in a secondary sense.

Q. 9. If the multiplication of these self-players continues, what influence will this have upon the sale of the records of musical compositions in the form of sheets?

124 A. There will obviously not be so much sheet music sold.

Question and answer both objected to as incompetent and irrelevant, as being a mere matter of opinion as to future possibility.

Signature waived.

NEW YORK, *January* 5, 1902.

Met pursuant to adjournment.

Present: Counsel as before.

WALTER DAMROSCH, a witness called on behalf of complainant, being duly sworn, testified as follows:

Q. 1. What is your name, age, residence and occupation?

A. Walter Damrosch; age, forty years; residence, New York City; occupation, musician, conductor of the New York Philharmonic Society; composer and lecturer on musical subjects.

Q. 2. What is a musical composition?

A. A musical composition is music composed or written for the human voice or for musical instruments or for the combination of both.

Q. 3. I show you several perforated roll records and ask you whether the perforations are in your opinion a form of notation?

A. They are.

Complainant's Exhibits 10, Little Cotton Dolly and Kentucky Babe shown witness.

Q. 4. I take it that you are not able to read this form of notation?

125 A. I am not.

Q. 5. There are several forms of notation?

A. A great many.

Q. 6. You are not familiar with all the forms of notation?

A. No.

Q. 7. What influence, if any, do these perforated roll records exert in reference to the distribution of musical compositions?

A. They tend very materially to increase their distribution.

Q. 8. What educational influences do these perforated roll records exert?

A. That's a very difficult question to answer. It would depend a good deal upon the class of music which is multiplied by such perforated rolls.

Q. 9. Is music intended for the ear or the eye?

A. For the ear.

Q. 10. In your opinion are these records which I showed you a few moments ago any less records because they are also parts of the instruments?

A. I can't see that that makes any difference whatsoever.

Q. 11. What is the object of a record of a musical composition?

A. To perpetuate it in such a form that others beside the composer may be ably to reproduce it.

Q. 12. To reproduce the music?

A. It serves for the composition the same purpose that the printing press does for language, to perpetuate musical ideas.

Cross-examination by Mr. BURTON:

X Q. 13. Just what do you mean by increasing the distribution of musical compositions?

A. I should say that with the era of the introduction of the musical instruments which mechanically reproduce the record of the perforated rolls, music is being bought and reproduced
126 in many homes where before there was little if any music because of the inability of the persons residing therein to play upon a musical instrument.

X Q. 14. You mean, then, that the knowledge of these musical compositions such as is gained through listening to them, is brought to a larger number of persons, by reason of the introduction and spread of the automatic means of making the music audible?

A. Yes.

X Q. 15. When you say music is intended for the ear, you are referring, of course, to audible music?

A. Music is intended to reach our brain through the sense of hearing, just as color reaches our brain through the sense of seeing.

X Q. 16. Musical records, that is, records of musical compositions, in any form of notation, are intended for the eye, are they not?

A. I suppose that there are systems of musical records for the blind by which they can perceive and recognize music by the touch.

X Q. 17. Otherwise musical records are intended for the eye, and by that means to reach the brain so as to convey the knowledge of what the record contains to the person who can read it?

A. Why no; there must be different kinds of records of composition possible, as human ingenuity invents new methods of transmission. The skilled musician mechanic of one of the mechanical instrument makers is able to read music from the roll of paper which he has perforated, but I as a musician who have not been skilled in that direction, would need the actual reproduction of the paper roll through an automatic self-player to enable me to hear or fix the composition so recorded in my mind.

X Q. 18. Do you speak according to personal knowledge of the fact, or only according to theory, when you say that the skilled musician mechanic is able to read music from the roll of paper which he has perforated?

127 A. I speak from inference, that if he can reproduce music printed in the ordinary and hitherto popular form of musical notation, on paper which he perforates for that purpose, he must be able to read what he has written just as a stenographer can translate into ordinary orthography what he has written down in shorthand.

X Q. 19. Do you know of any musician mechanic who is able to read the perforated rolls as stenographer reads his stenographic notes?

A. I have never met any personally.

Deposition closed.
Signature waived.

Complainant's Counsel offers in evidence the following catalogues for the purpose of showing that these perforated roll records are referred to by dealers in them and by manufacturers of and dealers in self-players as "Music."

(*a*) Catalogue of the Wilcox & White Co., "Music for the Angelus."

(*b*) Catalogue W. W. Kimball Co., "Music for the Kimball Piano Player."

(*c*) "Music for the Simplex Piano Player."

(*d*) "Descriptive List of Choice New Music for the Chase & Baker Piano Player."

(*e*) "Catalogue of Music Arranged for the Playano, Chickering & Sons."

(*f*) "Catalogue of 65 Note Selected Music Rolls for Use
128 with the Pianola, Peanophone, Simplex, Aeriol, Chase & Baker, &c.," by the Perforated Music Roll Company.

(*g*) "Lyraphone Music Catalogue, Sanders & Stayman Co."

(*h*) "Catalogue of the Circulating Library of Music for Aeolian Grand and Orchestrelle."

Recess until 3:30 P. M.
After recess.
Adjourned to Tuesday, January 6, 1903, at 10:30 A. M.

NEW YORK, *January* 6, 1903.

Met pursuant to adjournment.
Present: Counsel as before.

HORATIO PARKER, a witness called on behalf of complainant, being duly sworn, testified as follows:

Direct examination by Mr. RAEGENER:

Q. 1. Please state your name, age, residence and occupation?

A. Horatio Parker; age 39; residence, New Haven, Conn.; occupation, Professor at Yale University.

Q. 2. You are the Professor of the Department of Music of Yale?

A. I am Professor of the Theory of Music at Yale.

Q. 3. Are you likewise a composer of music?

A. I am.

Q. 4. Will you kindly name one or two of your compositions, those that are best known?

129 A. Hora Novissima and St. Christopher.

Q. 5. What is a musical composition?

A. I should say it was the realization of the musical idea of the composer.

Q. 6. How is an author's composition conveyed to others?

A. By two methods; either by means of a record, material or visible, or through the ears; that is, either through the eyes or through the ears.

Q. 7. I show you a perforated roll record of an improvisation of Guilmant, and I ask you whether that is a record of a musical composition?

A. It is.

Q. 8. There are various forms of notation, are there not?

A. There are various forms of notations, yes.

Q. 9. Please state those with which you are perfectly familiar?

A. I am familiar with most printed forms of notation; the two systems, which are commonest are the usual system of printed notes on a printed staff and the tonic sol-fa systems, which consists largely of syllables and letters and figures.

Q. 10. These perforations in these perforated roll records are also a system of notation, although they cannot readily be read, are they not?

A. If you define a system of notation as a means of recording music, they are.

Q. 11. What is the difference between a musical composition and a record thereof?

A. A musical composition is the musical idea of the composer, and the record is a means which is employed to convey the idea from the mind of the composer to the mind of another person.

Cross-examination by Mr. BURTON:

X Q. 12. The complete record of a musical composition that is, all that goes to make it a record, would include all that is
130 necessary to convey the musical composition to the mind of another than the composer, would it, or not?

A. Yes, a complete record must be complete.

X Q. 13. By the word "complete," I did not mean to suggest the idea of entirety; would anything constitute a record of a musical composition, according to your understanding of that term "record," which could not convey the musical idea of the composer to another?

A. No.

X Q. 14. If the record is in a form calculated to convey the idea through the eye, that is a readable or visible record, all that would be necessary, in order to make it a true record, would be legibility as to the symbols employed to present the musical idea, would it?

A. It does need legibility, but whether it needs more I am not prepared to say at this moment.

X Q. 15. If it is a record of the sort intended to reach the mind through the ear, it would need audibility, then, I suppose?

A. I don't see how a record can have audibility; the reproduction of a composition can be heard; the record itself cannot.

X Q. 16. Then, in fact, the record that is designed to reach the mind through the eye, and the record designed to reach the mind

through the ear, differ in that the record addressed to the eye performs its entire function as a record by its adaptation to the eye, whereas the record addressed to the ear cannot by itself perform its function at all, since it cannot reach the ear; is there that difference?

A. The record addressed to the eye never performs its entire function until it has been materialized in tones. It performs the largest part of its function, which is the conveying of a musical thought from the mind of the composer to the mind of the receiver, when it meets the eye of a sufficiently trained musician.

131 The record addressed to the ear likewise does not perform its function until it reaches the ear, although, as a record, either that addressed to the ear or that addressed to the eye, may presumably be perfect although without utterance.

X Q. 17. In the case of the record addressed to the eye, I infer from your answers that the musical thought of the composer may be conveyed by such record through the eye directly to the mind of the properly trained musician, thus performing the function of transference of musical thought without intervening audibility; in the case of the record addressed only to the ear, is there any corresponding quality, that is, can the record addressed to the ear convey the musical thought of the composer to the mind of the musician, however highly trained, without intervening audibility?

A. The record addressed to the eye must reach the eye; the record addressed to the ear must reach the ear; that is to say, if they are to fulfill the function for which they are made; otherwise there is no transference of thought.

X Q. 18. The record addressed to the eye is complete in itself for the purpose of conveying the musical thought of the composer through the eye to the mind of the musically competent reader; must the record addressed to the ear be sufficient in itself to convey the musical thought of the composer through the ear to the musically competent mind of the hearer, in order to be a record in the same full sense as that term is applied to the record addressed to the eye?

A. There seems to be some danger of mixing up the record itself and the function of the record. I think the question has been already answered.

X Q. 19. Do you know of any way of determining whether a given thing is a record except by finding out whether it can perform the functions of a record?

132 A. I don't know of any way of finding out whether the thing can perform the functions of a record excepting either by comparing it with the original musical idea or with another authentic record.

X Q. 20. You would have to use either the eye or the ear to make a comparison, wouldn't you?

A. Either the eye or the ear, or both.

Redirect by Mr. RAEGENER:

R. D. Q. 21. I take it that but a very small percentage of musicians are so skilled as to be able to read a musical composition correctly with the eye and hear it correctly in the mind without either singing the composition or playing it upon some instrument?

A. The percentage of people who can read an orchestral score in that manner is very small, but the number of people who can read a melody is much larger and, I think, rapidly increasing.

Deposition closed.
Signature waived.

NEW YORK, *January* 6, 1903, 1 p. m.

THOMAS W. SURETTE, a witness called on behalf of the complainant, being duly sworn, testified as follows:

Direct examination by Mr. RAEGENER:

Q. 1. Please state your name, age, residence and occupation?

A. Thomas W. Surette; age, 41; residence, New York City; occupation, lecturer on music.

Q. 2. Please state where you are engaged in giving lectures?

A. For the Board of Education of the City of New York,
133 the Brooklyn Institute of Arts and Sciences, the American University Extension Society of Philadelphia.

Q. 3. Please name some of the operas composed by you, and some of your other compositions?

A. Priscilla, an opera; the Eve of St. Agnes, a dramatic ballad.

Q. 4. What is a musical composition?

A. It is a musical idea conceived by the composer.

Q. 5. I suppose that you agree with me that defendant's perforated roll records are not intended to be read, and that they cannot ordinarily be read by a musician not familiar with this form of notation?

A. I do.

Q. 6. Does the fact that this form of notation cannot be read at sight make it any less a record of a musical composition?

A. No.

Q. 7. Please select from the United States Patents shown you such of them as illustrate peculiar forms of notation?

A. No. 6,528, musical notation patented by E. von Heeringen, June 12th, 1849; No. 391,887, of October 30th, 1888, to D. Fallon; No. 452,995, of May 26th, 1891, to Dodd. No. 6,528 adopts an entirely new kind of note, both as to shape and value, and entirely does away with sharps and flats and naturals, using the common staff. The patent to Fallon uses letters and other characters or signs in place of notes, and follows somewhat the principle underlying the tonic sol-fa, so-called. There is no staff used. The patent to Dodd also dispenses with the usual musical staff, and offers a simple means of reading music.

The patents referred to by the witness are offered in evidence as

Complainant's Exhibits, with the name and date of each
134 patent respectively, and it is stipulated that ordinary Patent Office copies may be used in place of certified copies or originals.

Q. 8. Is a musical composition intended to be heard or to be seen?

A. To be heard.

Q. 9. It is a fact, is it not, that not all musical compositions are recorded?

A. It is. There are many traditional melodies which existed for centuries before being written down, and there are some still existing, not, so far as we know, having been written down. Also I have composed music which exists, but has never been recorded.

Q. 10. Please explain what is meant by the tonic sol-fa methods of notation?

A. It is a method of notation in which the initial syllables of the words which name the notes of our scale, do ra, mi, etc., are used instead of writing the notes on a staff; these syllables, with other simple signs, constitute the easiest way of learning to sing.

Q. 11. What is the primary object of any record of a musical composition; is it to enable a highly trained and skilled musician to perform the feat of hearing music in his mind, or is it to enable the production of musical sounds?

A. The primary object of a musical record seems to me to be the reproduction in audible sound of the composer's idea.

Q. 12. It is a fact, is it not, that sheet music is ordinarily referred to as music, and that perforated roll records are likewise referred to as music, and that in both cases the musical composition is referred to?

A. It is.

Q. 13. Is it conceivable that the perforated style of nota-
135 tion may be adopted in time by composers as the first form in which their composition is published, rather than the present style of sheet music?

Objected to as incompetent.

A. I think it is.

No cross-examination.
Deposition closed.
Signature waived.
Prima facie case closed.

136 Circuit Court of the United States for the Southern District of New York. In Equity.

No. 8126.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

Testimony taken on behalf of complainant, in rebuttal, pursuant to notice, under and pursuant to the 67th Rule of the Supreme Court, as amended, before John A. Shields, Esq., Standing Examiner, at the offices of Messrs. Dickerson, Brown, Raegener & Binney, 141 Broadway, New York City, on Wednesday, January 20, at 11 A. M. *et seq.*

Appearances.

Alex. P. Browne, Esq., Edwin H. Brown, Esq., and Louis C. Raegener, Esq., of Counsel for Complainant.
Charles S. Burton, Esq., and Edward S. Evarts, Esq., of Counsel for Defendant.

OSCAR F. GUNZ, a witness called and sworn on behalf of Complainant, testified as follows:

Direct examination by LOUIS C. RAEGENER, Esq.:

Q. 1. What is your name, age, residence and occupation?
A. Oscar F. Gunz; age, forty-nine; residence, Rutherford, N. J.; occupation, expert in patent causes and solicitor of patents, with an office at 141 Broadway, in the City of New York.

137 Q. 2. Please state what experience you have had in the practice of your profession, and more particularly what, if anything, you have had to do with reference to the construction of musical instruments, inventions relating to the same and to the art of music, including musical notation and perforated sheets, such as are used with self-playing instruments and with mechanisms for playing key-board instruments?

A. I am a graduate of the Technical University at Hanover, Germany, where I studied mechanical and civil engineering, technology in all its branches and kindred matters from 1872 to 1877. For the last twenty-five years I have been constantly engaged in preparing patent applications, examining patents and inventions, comparing inventions with claims, writing opinions and the like, and for the last seventeen years I have been constantly engaged in testifying as expert in causes in the United States Courts and before the United States Patent Office. During this time I have had occasion to make myself thoroughly acquainted with the construction of musical instruments of all kinds, especially pianos, organs, automatic musical instruments, such as music-boxes, organettes, etc.,

and with automatic playing mechanisms for musical instruments such as the orchestrion and piano players, in all the phases of their development. I have used such piano players very extensively for a number of years, and made myself fully acquainted with the various kinds of music sheets used in connection with the same. I began taking music lessons in this country in 1866 and for ten years from that time played the piano regularly, but since that time have neglected it more or less. During the years I spent at Hanover (1872-1877) I had occasion to come in contact with the greatest musicians of the day and to become personally acquainted with the same and to hear them play very extensively, both privately
138 and publicly. I am referring now to Franz Liszt, Anton Rubenstein, Hans von Buelow, Josef Joachim, August Wilhelmj, Pablo de Sarasate and others. During this time I had occasion to become personally acquainted with some of the leading singers of the time. I spent very much of my time in attending concerts and operatic performances, and in discussing music in all its phases with the musicians with whom I was acquainted, and had occasion to hear and study the best music, both during rehearsals and public performances.

Q. 3 Please define music and musical notation?

A. In the Century Distionary I find a number of definitions of music, from which I quote the following:

"1. Any pleasing succession of sounds or of combinations of sounds; melody or harmony; as, the music of the winds, or of the sea."

From various definitions of music given in the Standard Distionary I quote the following:

"3. Any succession or combination of sounds pleasing to the ear; melody, harmony; hence, any entrancing sensation or emotion, such as might be caused by melody or harmony; also, the capacity for making melodious sounds; as, the music of the children's voices, etc."

Music, of course, may be exceedingly simple, especially when consisting of a mere melody produced by one of the simplest of the numerous instruments which are in use to-day.

Broadly speaking, musical notation is any record of music, so that it may be reproduced from such record. Music, simple or complex, is nevertheless music. The simplest is as truly music as the most complex.

139 Taking an illustration from the patent law, I call attention to the telephone, which to-day is in general use and has almost become a necessity in commercial and private life. Its perfection, its great capabilities and its general use are well known. The original telephone of Prof. Bell's, however, as built, was so sensitive that it could only be used in the country where there was no disturbing noise. It was, nevertheless, a telephone. It was developed so rapidly, that in a few years the marvelously perfect instrument of to-day was evolved. Although now of greater capabilities than Prof. Bell's original, it is nothing but a telephone. It differs in degree from Prof. Bell's, but not in kind. Both instruments are

telephones. Neither is anything more than a telephone. So music of the ancients may not have possessed that wonderful, soul-inspiring melody, that perfection in phrasing nor the artful building up of the works of our great composers, but it was just as truly music.

As there is no difference in kind or fundamental difference between Prof. Bell's original telephone and the perfected instrument of to-day, so there is no fundamental difference between music of the ancients and more elaborated music of the present day. In each case the difference is one of extent or degree.

Q. 4. State briefly and in a general way the history of musical notation, explaining with reference to each musical notation which you may mention its capabilities for accurately recording musical compositions and the facility with which it may be read?

A. From time immemorial human beings have been accustomed to make records or visible memoranda of their thoughts, emotions, mental impressions of things they have seen, and of knowledge they have acquired, partly for the purpose of enabling themselves to repeat such performances, actions, etc., and to again traverse paths which they have passed once before, and partly also for the purpose of instructing and guiding others, so that they might also acquire the knowledge possessed by the first discoverer.

The blazed trail in the forest is a record of a path traversed, and this blazing is done for the purpose of showing the path to the original discoverer at a later period, or to others who may follow, and this finally developed during the course of ages into the named or numbered streets and avenues and numbered houses, and also resulted in the making of maps, which are nothing more than the records of lands and countries, and give full information as to what they represent, to others, without requiring these others to actually have visited such countries or traversed the paths, roads or streets on the map.

In a manner similar, in a certain sense, to the blazing of a trail, man has recorded experiences of all kinds, first in stone (by hieroglyphics and the like), then on leaves of plants (papyrus), and on paper, as at the present day. These records conveyed information by pictorial representations, as, for example, the carvings in the Egytian and Assyrian tombs, and in maps, views, paintings, photographs, and by means of word symbols or characters, representing word symbols, which can be designated as "recorded words," in contradistinction to the "spoken" word.

The reasons for making such records are clearly the impossibility of conveying such information by word of mouth, and the impossibility of remembering all such information, and the unreliability of such information if based on memory only and if transmitted by word of mouth only.

The ancient Hebrews had a system of musical notation, and the ancient Greeks had a system of notation, which required very many characters; but it was just as truly a record or notation of their musical productions as anything since developed is a musical record or notation. The Roman music was

merely an amplification of the Greek music and need not be considered separately.

As early as the seventh century the necessity of some record or notation for instructing the priests how to intonate their chants, etc., became felt, and gradually there developed a system of notation known as the "neumatic" system of notation, because it comprised peculiar symbols known as "neumes," which were placed over certain words to direct the rising or falling of the voice, or other modifications in singing. In the further development of this system of notation, the neumes were placed higher or lower in relation to each other, for the purpose of showing by their positions as well as by their characters, the necessity for rise or fall, and extent of the same.

I will produce examples, to illustrate what I have said about neumatic notation.

From a work known as "Memoire sur Hubald et sur Traites de Musique, par. E. de Coussemaker—Paris, J. Fechener, Libraire, Place de Louvre, 12-1841," examined by me in the Lenox Library, on Fifth avenue, New York City. I have had made photographic copies of a number of plates which I now produce.

Plate 1 shows neumes of the earliest period of neume notation; the neumes in this case being distinctive marks arranged above words. This is true of both specimens on this plate. They belong to the eighth and ninth centuries, and to that one of the two classes into which neume notations have been divided which is known as the Saxon method; the other class being described as the Lombardian method.

Plate 2, in the upper specimen, also shows some Saxon neumes, but those of the lower specimen are Lombardian. 142

The neumes in this class are more distinctly arranged in relation to their height and position, and thus give clearer information. Likewise, these Lombardian neumes are more distinct and resemble the notes of modern notation. This specimen is from the tenth century.

The neume writing on plates 1 and 2, as will be observed, is without any lines whatever, and the neumes are adjacent to, that is, above the words, although sometimes in isolated cases they are written below.

The only object of the neume notation was to give others information, as to when to raise or lower notes, or to preserve for the originator this information to a subsequent time, in case he should forget the way in which the music was first rendered. Having had this function they were records of musical productions, and consequently notations.

Plate 7 from the work referred to above, shows in Fig. 1 the use of a single line in connection with the neumes, for facilitating a comprehension of the position of notes, and so the reading of the notation. Later, two lines were used, one red and the other yellow, these also having been adopted for the purpose of facilitating reading of the notes. To simplify my explanation I may add that one of these lines was marked F, all notes on it having been F. The notes

above the lines were therefore above F, and the notes below the line were below F.

In Fig. 3 of plate 7, we have notation with four lines, of which the uppermost one is, in the original plate, yellow, the next black, the next red, and the lowest one black.

All the specimens I have given were and are musical notations, and sufficient to give anyone skilled in such notations the information requisite for enabling him to perform the music in a
143 manner in which it had been previously produced. More elaborate notation naturally arose, with a greater number of neumes, and scope, so that where formerly but a single mark or character was provided for a word of several words, to indicate rise or fall in tone, later on two, three or more neumes were provided. Naturally, with this increase of characters or neumes came greater difficulty in reading, and hence more lines were provided.

From the specimens of the Saxon system of neumes which I have produced, it will be observed that the neumes did not have any fixed dimensions, either up or down or lengthwise, or any fixed position, nor did they express time value. The neume writing on the lower part of Plate 2, however, is quite elaborate, and the positions of the neumes in relation to each other serve to indicate rise and fall of tone. As appears from the lower group on Plate 2, neumes gradually developed into square or quadrilateral figures or heads, and were frequently connected by lines with those preceding and those following them, showing that they should not be sung or produced disconnectedly. They thus formed the basis for the so-called Gregorian notation, from which was derived the White-head notation; and from the latter it was but a matter of a few steps to the present system of notation, known as staff notation.

In the neume notation time was not expressed, and not until the fourteenth century was there any notation with different shapes of notes indicating time.

Neume notation can be translated into modern staff notation, and I have read works in which such translations were made. Thus it is evident that the neume notation was a musical notation, because by means of it and by means of it only, the musical thoughts of the composers and singers of olden times have been transmitted to us of the present time.

144 A book printed in German or Russian is unintelligible to one not acquainted with the Russian or German language, and even if acquainted with the German or Russian language, in order to read such a book, he must necessarily be acquainted with the German or Russian type, because these types are radically different from our English or Latin type. Although persons not acquainted with the German or Russian language cannot read such German or Russian books, yet these German or Russian publications are records in the true sense of the word, and, as I understand, are copyrightable according to the copyright laws of the United States. For the same reason that a person in order to be able — intelligently and rapidly read Russian or German must know the Russian or German type, a person attempting to read neume notation

must have made himself acquainted with the neume system of writing.

Staff notation comprises one or two groups of five equidistant parallel lines known as staff lines, and a series of short horizontal lines used above and below the staff lines and known as "ledger lines." The notes are composed of white or black heads on and between the staff lines. The staff is divided by vertical lines into measures. The whole notes and half notes are white, or, in other words, made in the form of elliptical rings. The rest are black. Time value is indicated by vertical lines extending from the heads of all notes less than whole notes, and by lateral marks on such vertical lines of some notes.

Staff notation is used very extensively to-day, but yet many other systems of notation have been devised during the last few years, and are being devised up to the present time, all with a view of simplifying and to facilitate learning and reading. It will not be necessary to discuss all of the vast number of improvements suggested
145 in this and foreign countries. Perhaps more suggestions have been made in foreign countries than in our own.

A system which has been received with approval by a large number of persons engaged in studying and performing music is that commonly known as the tonic-sol-fa system, which differs radically from staff notation in that among other things its notes are indicated by syllables or words.

As an illustration of a very simple notation I refer to the notation for the xylophone or metallaphone, a specimen of which I now produce, with the instrument itself. It will be seen that the notation consists of letters spaced in measures, some letters being placed higher or lower accordingly as some notes are to be played above or below the octave recorded.

Of the patents for such improvements it will be sufficient for me to call attention to a number granted in the United States.

In U. S. Letters Patent No. 122,096, to F. W. Acee, of December 26, 1871, it will be seen that notes of conventional shape are divided into groups of different lengths, and that lines are entirely missing; each of the seven notes of the scale being individualized by a distinctive color. Evidently this inventor did not consider staff lines very essential.

U. S. Letters Patent No. 391,887, to D. Fallon, of October 30, 1886, proposes to dispense entirely with the representations of the notes common to staff notation, with the lines and all the marks peculiar to staff notation. In place thereof the keys are marked by means of letters, each octave having a peculiar kind of type, and these letters are used for the notations. The consonants only are used for expressing the notes of an octave, including the half tones, for example, "B, D, F, G, Y, L, C, N, V, R, S, T," and the same letters in different types for other octaves. The time is indicated by vowels.

146 I next call attention to U. S. Letters Patent No. 429,841, to C. Clements-Kropp, of June 10, 1890. The inventor considers his notation is more perfect and less complicated than ordi-

nary staff notation. He also makes use of a certain number of characters for indicating the several notes of an octave and for the various octaves provides them with various affixes, for example, in Fig. 2, where for one octave the note indicators, which are substantially the numbers 1 to 7, are provided with peculiar appendixes at the bottom; at the next octave the bottom appendix is slightly different, the middle octave has no appendix, the first octave above the middle octave has the appendix at the top, and so on.

I next call attention to the U. S. Patent No. 482,442, to J. W. Robberson, of September 13, 1892. In this case also use is made of peculiar characters which are to be used in place of the conventional notes of staff notation.

I next call attention to U. S. Patent No. 608,771, to C. C. Guilford, of August 9th, 1898, and of which the inventor says that his objects are to provide a simple and rational means by which composers may adequately express their conceptions. It will be seen that this system consists of the use of Roman numerals in connection with Arabic numerals, punctuation marks and other marks, dispensing entirely with the well-known line of staff notation, and I call special attention to the fact that this was patented only about five years ago.

I next call attention to U. S. Patent No. 663,512, to G. L. Peterson, December 11th, 1900. It will be seen that in this notation use is made entirely of numerals for indicating the method of playing, and the usual staff lines, bars and other marks of the ordinary staff notation are entirely dispensed with.

I next call attention to U. S. Letters Patent No. 229,365, to J. B. D. Black, patent June 29th, 1880. It will be seen that there is notation comprising peculiar characters, of which there 147 — seven, each of a different shape; each character corresponding to a key, and that the person playing the music can readily find the key by observing the shape of the character and finding the corresponding key on the key-board. This is clearly illustrated in Figs. 3 and 4. The inventor says:

"My invention has for its object to facilitate the teaching of music, especially with reference to pianofortes, organs and keyed instruments of a like nature, by marking the key of the instrument in a manner to correspond to the notes which they represent; and for this purpose I employ a system of musical notation in which the several notes or symbols are shaped so as to approximate in appearance the shape of the letters from which they derive their applications."

This patent shows clearly the desire for a notation which renders it easier to find the proper keys on the keyboard than does the ordinary staff notation, and shows one of the numerous attempts that have been made for the purpose of not only facilitating the reading of staff notation, but also facilitating the performance of the music.

Besides the various notations which I have mentioned, there have been other records or notations made by machines during the playing of a musical composition. I understand that I shall have to discuss in a later answer these automatic recording machines and the

work which they perform, so here it will be sufficient for me to say that the records or notations resulting from them consist of note indications made by pencil or pen marks, or made by cutting incisions in positions relatively to each other, which will indicate relative musical values of notes which are relatively higher and lower in the musical scales.

148 To these automatically made records, especially the kind where the note indications are made by cutting incisions, are analogous the records or notations consisting of perforated music sheets which are used for playing various instruments. As I understand I shall be called upon to discuss these perforated music sheets in subsequent answers, I will content myself now with a mere allusion to them, this being in my opinion proper in considering the history of musical notation.

It will be seen that most of these notations differ radically from ordinary staff notation, and that while some use the staff lines, some dispense with the staff lines entirely; some use letters; some use more than five staff lines; others use differently arranged lines; some use colors; and others dispense with the conventional note characters entirely and use letters; and others dispense with the conventional time indicators; and others use note characters different essentially from the conventional form.

Musical notation for the blind, as all notation for the blind, is produced in raised characters. Ordinary staff notation has been produced on a very much enlarged scale in raised characters, but is not used, as it is too difficult to read. Ordinary letters are not used in blind writing, as it is too difficult to read them, but all writing is translated into the blind alphabet, which consists of dots and blank spaces, arranged somewhat in the manner of the Morse alphabet, with the difference, however, that it is not all arranged on one line, but on two or three superimposed lines. So that I may be fully understood, I produce herewith a piece of music in raised notation for the blind.

In using this musical notation for the blind, the blind person passes his fingers over the raised characters and can tell what notes appear and in what succession, and can memorize this, or he

149 can read this writing or notation in advance of singing, by passing the fingers over the raised characters, the same as the singer or other musical performer reads his notes in advance of playing or singing. This musical notation for the blind which I have just been discussing has no staff lines, nor has it any of the usual characters or characteristic features of staff notation, and in fact is absolutely unintelligible to a person not acquainted with blind writing. Yet it is musical notation in the full sense of the word, and is as much sheet music as are the sheets on which ordinary notation is printed or produced. "The Howe Memorial Press of Boston" have published many hundred musical works in notation for the blind.

I have thus shown that mankind ever had the desire of producing a record of its musical expression, and resorted to various means for producing such a record, and that in every case one or more persons were conversant with the record used, and that consequently this

record conveyed to them the intelligence for which it was designed, and that this record, therefore, indicated and showed the musical thoughts expressed by the author of such notation, and hence this notation was a record of such musical expressions, even if the world in general could not use it, because the world in general was not acquainted with this peculiar kind of notation. Nevertheless, those acquainted with such notation, whether they were few or many, could transcribe it or translate it into conventional staff notation known by the greater number of people.

A composer could use any method of recording his composition, even if nobody but he himself could read such record with facility, provided such record enabled him to reproduce the composition at a future time.

A musical composition, to be a musical composition, need not necessarily contain all the musical notes known or that can
150 be produced on the key-board, or on a musical instrument, and can be limited to a few notes, and, in fact, to a single note. A very fine composition exists, the melody of which contains but a single note "E." This composition, known as "Ein-Ton," is frequently sung, and was composed by Peter von Cornelius, the friend and contemporary of Franz Liszt. Cornelius was by no means an ordinary composer, and one of his operas was frequently performed with great success at the Metropolitan Opera House in New York City.

Q. 5. Do you know the practice of composers as to writing records of their compositions, and, if so, state so fully?

A. Skilled musicians have been able to write musical thoughts in the notations of the times in which they lived without resorting to the use of a musical instrument, the same as we record our thoughts by use of a pen in writing.

Composers sometimes, however, instead of recording their compositions by staff notation, record them by producing their compositions on a musical instrument, and then laboriously transcribing the same to staff notation, or they get some one else to transcribe the compositions which they play.

Q. 6. Has there been any other way of recording musical compositions?

A. Composers have performed on various keyboard musical instruments, free improvisations, variations, etc., to be recorded by machines for automatically making a legible and permanent record of the notes during playing. Such automatic recording machines have been patented as far back as nearly thirty years ago, and also since, and have been used practically, and I myself have used them.

I now produce a number of United States and foreign patents which show the construction, arrangement and operation of such automatic recording machines.

151 In U. S. Letters Patent No. 149,593, granted to J. Metzger on April 14, 1874, is a machine constructed with a series of type-wheels C in connection with an inking ribbon and means for feeding a paper sheet E. B are the registering levers, of which there are thirteen, to correspond with the black and white keys. The

levers B have their center of motion at one end, being hung or pivoted so as to move freely on a stud when a corresponding key is depressed, the corresponding lever is pressed into contact with the inking ribbon. It will not be necessary to discuss the details of this machine, for it is sufficient to say that as long as a certain key of the musical instrument is depressed, a line will be printed on the paper E, which line corresponds in its position between the side edges of the paper with the musical value of the key, and the length of this line shows the time value of the note represented. The patentee states, in the lower part of the second column of page 1:

"The device described is more essentially designed to register and preserve for future reference and use the phantasias or improvised music."

The specification further states, in the upper part of the left hand column of page 2:

"Thus causing the paper to be printed or marked with a long or short mark or character corresponding with the length of time during which the hammer is kept in contact with the ribbon."

The patent states that the characters or notes *o*, o^1 taking the place of the ordinary notes in music, are *easily learned;* and also states that the machine may be constructed without the use of a ribbon and

the characters representing the notes may be produced upon
152 paper by means of points arranged on the levers, in the same manner as in a Morse telegraphic instrument, which, as is well known, produces raised characters.

I next refer to U. S. Letters Patent No. 227,101, granted to L. A. Fernow on May 4, 1880. Fig. 7 of the drawings shows the notation, and at the side of this notation there is a translation of the music recorded into staff notation. The specification says that the invention relates to an apparatus for

"recording music, however executed, at the time it is played upon an organ or piano. This apparatus is to be removably attached to a piano or organ over the key-board and to operate in suitable connection with mechanism for producing the record."

It will not be necessary to describe in detail the construction of this apparatus, it being sufficient to state that means are provided for feeding a sheet of paper and means for making impressions on this sheet of paper, each impression corresponding in its position between the side edges of the sheet to the musical value of the key depressed, and the length of said depression corresponding to the time value of the note. The specification states among other things:

"The music as it is played is marked upon the progressing paper, which forms a permanent record, from which the music can be reproduced upon the piano or organ, or can be converted into the usual sheet music. * * * Instead of the vibrating recording pen, vibrating perforating points could be used, which would perforate instead of mark the paper." * * *

This shows that the inventor had in mind not merely making a record or notation by writing with a pen or pencil but that the record or notation can also be produced by perforations.

153 I next refer to U. S. Letters Patent No. 507,840, granted to G. Pilar de Pilchau, on October 31st, 1893. This patent states at the outset that the subject of the application is a mechanical appliance for marking on a suitable surface the value and duration of the notes of a musical composition while the same is being performed on a piano, "and thus to produce a permanent record which may at any time be translated and transcribed into the ordinary musical notation" a record, such as produced by this instrument, is shown in Fig. 18 of the drawings, and beneath the same is a transcription of the record in ordinary staff notation. It will likewise not be necessary to discuss the mechanism except to say that means are provided for printing a line on the sheet for each key that is depressed, which line in its position on the sheet corresponds to the musical value of the note and the length of which line correspond to the time value of the note.

I next refer to U. S. Letters Patent No. 549,057, granted to J. L. Cantelo, on October 29th, 1895. The inventor states that the object of his invention is to provide a machine for enabling a player to register the score of a musical composition on a running band of paper in such a manner that it "may be readily transcribed into ordinary musical notation." It will not be necessary to describe in detail the mechanism as its functions are practically the same in the other patents just discussed. Fig. 2 clearly shows a sheet, and shows how lines and marks indicating the notes are produced on the same. As the machine shown in this patent, and those of similar construction previously discussed are used for the purpose of recording music, they must necessarily produce records or notations, and can produce records or notations of but one thing, *i. e.*, the music that has been played on the musical instruments in connection with which the recording machines are used.

154 I next refer to U. S. Letters Patent No. 722,904, granted to L. O. Rissman, on March 17, 1903. Fig. 5 of this patent shows how the note indicating marks are produced on the paper and it will not be necessary to discuss the construction of the machine. I call attention to the fact that this patent was issued as late as March of the present year, and it shows conclusively that inventors are still engaged in devising means for automatically recording compositions and in simplifying the constructions of such machines.

I next refer to German Patent No. 13,928, issued July 12th, 1881, to Rudolf Wilhelm Kurka of Vienna. This instrument is operated by electricity in such a manner that whenever a key is depressed an electric circuit through an electro magnet is closed and proper mechanisms are operated which produce a mark on a sheet of paper, which is moved with a uniform speed over a suitable support, so that accordingly as the key remains depressed a greater or less time, a mark of greater or less length and corresponding to the position of the key will be produced on a sheet of paper as shown in Fig. 3.

For the purpose of facilitating the transposing of the record thus produced into staff notation, a rule is provided which is marked the same as the keyboard and is shown at *z z*, in Fig. 3 of the drawings. The patent states that the function of this translating rule is to assist

in transcribing the record into ordinary staff notation, and that the rule in use is laid on the paper and is moved in the same direction in which the marks were made in recording, or the rule is fixed and the paper moved.

I next refer to German Patent No. 37,081, issued September 24th, 1886, to Paul Boehm and Fedor Juliusberger, of Berlin. The specification states that the apparatus, which is to be used with
155 musical instruments, has for its object to produce automatically a graphic representation of the notes of the piece played in such a manner that the representation of each individual note is clear and exact in regard to the value of each note, and can be used for subsequent transposition into ordinary staff notation. It also states that by graphically reproducing the piece played, composers are not only able to obtain a true record of the compositions, but piano teachers can correct the pieces which their pupils play for exercise in the same manner as an ordinary written exercise without requiring the actual presence or personal attendance of the teacher during the playing by the pupil. The apparatus is constructed with a pencil on the underside of each key in a suitable spring support, so that when ever a key is depressed the pencil will produce a mark, corresponding to the length of time that the key remains depressed, upon a sheet of paper drawn over a suitable support. Fig. 4 clearly shows the appearance of the sheet on which the record has been produced, and Fig. 5 is a representation in staff notation of the same sheet of music, which in this case is Beethoven's Sonata No. 3. The inventor also says that from the graphic representation of the piece played, for example, a composition that is played directly upon the instrument, and which never before had been written, a transcription into ordinary staff notation can be made with facility, if this composition should be published. It is very evident that the inventor intended producing a musical record which could be read with facility, as otherwise he would not have stated that his device is to be used for the purpose of producing a record of the playing by scholars and without requiring the actual presence of the teacher. If this record would not be legible and understandable by the teacher,
156 the teacher could not mark and correct the mistakes made by the scholar in the same way as in ordinary written school exercises, but yet the specification states that this is one of the objects of the machine, namely to furnish means whereby the teacher can correct the exercises of the scholar without actually being present during playing.

I next refer to German Patent No. 88,123, issued September 18, 1896, to Edmund Schneider, of Munich. This instrument is so arranged that the record is made on a reduced scale as shown in Fig. 4, that is to say the 68 notes can be written on a strip of paper about two inches wide, more or less. After the note strips have been produced they can be cut into lengths and pasted in a book successively in the same manner as ordinary staff notation appears, and as shown in the drawings of this patent.

I have made translations of the three German patents referred to and here produce the same. I am fully conversant with the German

language and have frequently translated from German to English for use in the U. S. Courts and the Patent Office.

I have myself lately used and tested an automatic music recording machine which I understand was built by Robert Paine of New York City. It recorded every note played, just as played, in proper order and proper position. I played slowly and rapidly, single notes, chords, runs, trills, legato, staccato, etc., and then examined the records produced and found that the notation was correct.

The product of all such automatic recording machines is a musical record or notation capable of being read and of being transcribed, transposed or translated into ordinary staff notation. It should be noted, however, that a number of the inventors have stated
157 distinctly that such transposition or translation into staff notation is not necessary and that the records produced on their machines can be used directly for playing or singing. If the products of these machines would not be musical records or notations, there would not be any utility in such machines. The sheets produced on these machines, by means of a tracing pencil or pen or perforator, are valuable as *records or notations only*, and outside of their value as such they have absolutely no value at all. It is not at all necessary that these recording machines should produce a record in staff notation in order that it may be intelligible, or in order to convey the desired informtaion, as long as the record correctly and reliably records the musical expressions of the player, while playing on a piano connected with a recording machine, or while operating the recording machine independently of the keyboard instrument played. It will be observed that each musical note, mark or symbol has its predetermined position on the record as regards its musical value, and can have this position only and no other position. The note, marks or symbols of one and the same musical value can have greater or less length. So that I may be clearly understood, I will state that all the note marks of the same denomination in each octave are on the same longitudinal lines, and that all differences in size of the note marks indicate differences in time value of the notes; and, likewise, the lengths of the intervals between the note marks on the same longitudinal lines indicate intervals of greater or less time value.

The recording machines produce such an absolutely true and reliable record of the notes played, that if the player strikes a wrong key, or does not hold the key long enough or too long, all these errors are recorded automatically and the correctness of the record is not dependent upon the skill, memory and liability of a
158 human being, making it manually, as in the case of producing a record in staff notation.

Q. 7. Is the ordinary staff notation absolutely perfect, or does it fail, or is it inherently incapable of recording all musical compositions in all details?

A. Ordinary staff notation is not absolutely perfect, and can never be made absolutely perfect, and is incapable of recording all musical compositions accurately in all details. The musical value and sequence of the notes can be indicated correctly in staff nota-

tion, but the time values cannot be indicated with absolute accuracy. The composer may indicate that the note is to be a whole, half, quarter, eighth, sixteenth note, etc., and yet that does not fully convey that which he had in mind, but the composer is using the best means, so far as staff notation goes, at his command. No composer plays, or could play, his compositions with absolute accuracy as written in staff notation, and no composer would or could expect others to play them with absolute accuracy as written, because the music would sound harsh, and the softness, which is so easily obtained by blending tones, would not be present. It is well known that in piano playing the keys are so manipulated and held that there is no abrupt and clear time interval between the musical sounds produced successively, except in certain cases, where certain tonal effects are to be produced. Ordinarily the keys are so held that one tone begins before the preceding one has ceased to affect the nerves of the ear, and this is known as legato playing. Of course, there are various degrees of legato playing, and this playing can be carried to such extreme and the tones blended to such extent that they become blurred. On the other hand, fine legato can be so played that the tones are only slightly blended, just sufficiently to take away the harshness that would appear if there was a distinct time interval.

159 In different parts of the same composition this blending may be greater or less, or even in parts of the same bar or adjacent bars the blending must be different to produce different musical effects. All that the composer can do in staff notation is to write the word "legato" or to place a curved line over the notes, and that is the limit of the indicating marks at his disposal. A composer frequently writes throughout an entire page "sempre legato," meaning "play all this legato," and yet no person would expect a musician to play the entire page in such a manner that the intervals between two successive notes should always be the same. Of course I am here giving due consideration to stops and other marks, but any skilled piano player having only the slightest artistic temperament would intuitively play the legato differently at such different times and different parts of the composition to produce the effects which he thinks necessary.

Q. 8. Is the art of reading staff notation and performing it easily acquired or not? In answering, please state your reasons fully.

A. From my own experience as a pupil and an instructor I know that it requires years of hard study to acquire the knowledge of reading staff notation. Many persons who can play very well and are able to read staff notation find considerable difficulty in playing music at first sight. They always require more or less study, and even experienced musicians, who are graduates of musical high schools, must spend considerable time in practicing the more difficult compositions before playing them readily. There are many compositions, especially those of Chopin, Taussig, Liszt, and their successors, which require much fingering and studying before they can be read and played. If staff notation were limited to the five lines of each staff, and the positions of the notes on and between the lines corresponded in the two staffs, and if the flats and sharps could

be indicated by positions instead of marks, or if the positions
160 of the notes relatively to the ledger lines in the various octaves would be the same, it would be much easier to read it than it is now.

Even highly skilled musicians frequently take a pencil and mark the extreme high or low notes by their proper names or letters, so as to have a guide when playing such a piece. As an illustration of how difficult it is to read staff notation, I refer to the sketch which I now produce, and which shows the treble and bass staff, each composed of the usual five lines. Taking the upper or treble staff of my sketch, all the notes there represented are the note "C;" the second one, which I have marked with the letter *x*, is what is commonly known as the "Middle C" and is below the bottom line and has a ledger line through its head. The first note to the left of this middle "C" is the "C" one octave below, and has four ledger lines through its stem, and in itself below the lowest ledger line, and thus is different in appearance from the "Middle C" as the "Middle C" has a ledger line through its head and this "C" one octave below the "Middle C" has its head below the ledger line. The "C" one octave above the "Middle C" is between the third and fourth lines. The "C" two octaves above the "Middle C" has two ledger lines, one beneath the head and one through its head. The "C" three octaves above the "Middle C" has five ledger lines through its stem, and in turn is on its uppermost ledger line. There is a "C" still higher, but it is impossible to represent this by ledger lines, and hence the representation of the "C" one octave below is used with the octave sign, consisting of the numeral 8. * * * In this uppermost staff of my sketch we thus have five "Cs" four octaves apart. The first has no ledger line through its head; the second has a ledger line through its head; the third is between the lines of the staff; the fourth
161 has a ledger line through its head, and the fifth is above the ledger line. It is evident that it is very difficult, not only to acquire the art of reading such notation, and requires great experience, but even with experience it is very difficult to read, for example, the uppermost "C" or the lowest one on this upper staff, when the same occurs suddenly among lower notes. But these are not all of the difficulties, as will appear if we examine the lower staff. The "Middle C" appears above the uppermost line of the lower staff and has a ledger line through its head. The "C" one octave below the "Middle C" in the lower staff is between the second and third lines, and is exactly the same "C" as represented in the upper staff as having four ledger lines above its head, but below the upper staff. The "C" two octaves below the "Middle C" in the lower staff is beneath the staff lines and has one ledger line above its head and one through its head. The "C" three octaves below the "Middle C" has five ledger lines through its stem in the lower staff, the lowest one of which lines is through the head. A person reading this staff notation must be able to distinguish, at a glance, between the upper and lower staff, and must be able to note all the fine differences that I have pointed out, instantly. I do not believe that it will be necessary for me to point out any more than I have the extreme difficulties encountered

in reading staff notation, unless one is very highly skilled and has had great experience.

Q. 9. Consider a perforated music sheet, such as has been commonly used in connection with self-playing musical instruments, and also with machines and mechanisms which are employed for automatically operating the keyboard of keyboard musical instruments, and state the reasons for your opinion that the same constitutes a musical record and a musical notation, comparing it,
162 so far as may be important with other musical notations you have above mentioned?

A. In answering previous questions I have pointed out that a sheet upon which a record or notation of music has been made by means of longitudinal marks of various lengths is a musical record, and that it is a musical notation. A "perforated music sheet" is just as much a musical record and musical notation as is a sheet such as referred to above, because it gives the information required for reproducing a musical composition, of which the perforated music sheet is a record. It is absolutely immaterial whether the marks, which form the record on the sheet, are made by a pen, or a pencil, or are perforated, or are raised characters, as long as they by their positions and lengths convey the requisite information.

The patent to Fernow, No. 227,101, of May 4, 1880, previously referred to, states on lines 56 to 60, that in place of recording pens, vibrating perforating points could be used which would perforate the paper, and, therefore, all I have stated in regard to the sheet having the marks made thereon by means of a pencil or pen, applies equally as well to a sheet having the marks made by means of a perforating or slotting device.

Facts have been recorded by printing or cutting, as, for example, the fact that a ticket has been used. For many years stamps for canceiling railway tickets were used which by means of a ribbon printed the date of issue on a ticket, but of late years these were replaced to a great extent by stamps which perforated or cut the figures. In the same manner, check stamps, which perforate or cut figures in the checks, have replaced the stamps which print on the checks. It might be contended that reading and understanding an automatic record of the kind described, or transcribing it into staff notation, is more or less difficult; but that does not in the
163 least affect its value as a record, for the fact still remains that it can be read at least by means of a rule or templet. It might also be maintained that staff notation can be read more readily than such an automatic record, but I have pointed out what difficulties are encountered in reading staff notation, and that great skill and experience are required for reading such staff notation, and that it can by no means be read as easily as is generally assumed.

The records produced on the automatic recording machines described in the several United States patents to which I have referred, and the record made on the Paine machine referred to, are readable and can be transcribed, as stated clearly in such patents.

Q. 10. Does the thickness or nature of the material used in making these perforated music sheets have any effect whatever upon

their value, and how does it compare with the material used for making records, as you understand the latter to have been made in the recording instruments that you have discussed?

A. The thickness or nature of the material used has absolutely no effect on the value of the record. I understand that these recording machines are not limited to any kind or thickness of material, but that naturally the paper would be used which occupies the least space, that is, a thin paper, but of course the record would be just as perfect on thick paper.

Q. 11. What is it that makes the value of one perforated music sheet as distinguished from another? Is it the difference of material of which it is made, or the musical composition of which it is a record? In answering this question you may state what it is that makes a large sale of one perforated music sheet rather than another.

164 A. The value of a perforated music sheet is not determined by the material of which it is made, nor its size, but is determined entirely by the quality, popularity and worth of the composition, *per se*. Of course I fully understand that a long sheet costs more to make, and sells at a higher price than a short one, as it requires more labor, but that is not what I understand as the "value" of a sheet. Some music is better than other music; some music is more popular than others; and in a similar way there are various possible reasons for making a piece of music in demand. Whatever the reason may be, it is always based upon the composition, that is, upon the musical thoughts expressed by the composer who originated the melody. It is immaterial whether this compoosition appeals to those who appreciate only classical or highly refined music, or to those who appreciate ordinary or so-called "popular" music only. The music sheets are always procured and purchased only for their musical value, that is, for their worth as a record of the music desired; and hence a composition which is very popular and in great demand makes the music sheet of this composition much more valuable than that of others which are not in so great a demand. If such a sheet was merely perforated at random, and did not contain a musical record, it would serve for use in mechanically operating a musical instrument, but would and could not produce music, and hence would be unsalable.

A perforated music sheet has no utility except for playing music; it is valuable only in accordance with the popularity or desirability of the music of which it is a record or notation; it is sold only as music and only for producing music; it is called music by everyone; it is used and is enjoyed only as music; the material of which it is made is not the cause of its value.

165 While it is true that it has a mechanical function; it is nevertheless also true that the mere mechanical function might be carried out, even if no musical composition was recorded on the sheet; but of course such a sheet would be of no value whatever. It is not a part of a mechanical musical instrument, because if it would be it would make a different mechanical

musical instrument each time another sheet is used. The fact that it is to be associated with an instrument in order that it may be put to one of its possible uses is unessential, because even ordinary staff notation for a musical instrument, for example, a piano, cannot be used without an instrument, and not with one unless the user can interpret the staff notation and has mastered the technical difficulties of the instrument. Staff notation expresses musical thoughts in a form appealing to the eye, and thereby instructs the user as to the proper keys or analogous device to be manipulated. With a perforated music sheet and a playing mechanism the perforations cause the depressing of the keys and thus produce the musical composition. The work of the composer is clearly the same in each case, as his work consists of the musical composition and not the means of producing or causing the producing of the sounds.

Q. 12. Aside from any question of reading a perforated sheet directly by viewing it, what can you say as to the value of a perforated sheet as a record which will enable the recorded musical composition to be played for a person charged with the duty of writing such musical composition in staff notation? You may consider this not only generally but specifically with regard to pieces composed, improvised or extemporized during the manual playing, and automatically recorded on one of the machines you have described as being suitable for automatically transcribing a musical composition?

A. By means of such a perforated sheet, the composition could be played on a suitable mechanical musical instrument and a
166 person skilled in the art of writing music in staff notation could write a record in staff notation of the music produced, while it is being produced. Pieces could thus be composed, improvised or extemporized by manual playing and automatically recorded on a perforating recording machine, such as I have described, and the sheet thus produced could then be used for playing on a mechanical musical instrument, as stated above, and a record could then be made in staff notation, in the manner stated above.

Q. 13. Suppose there were no record of a musical composition than that consisting of a perforated music sheet, and state what under those circumstances would be the value of a perforated music sheet?

A. It would be of inestimable value.

Q. 14. Witnesses called for defendant have disputed the contention that a perforated music sheet such as you have had under consideration is a form of notation, even though it is obviously a record of a musical composition, and those witnesses gave as reasons that, as a perforated music sheet is not divided up into measures, it does not give time or duration of notes, and some give as a reason that pitch is not indicated. Please assume for the present that these reasons are sound, and then state whether or not they determine whether a perforated music sheet does or does not constitute notation?

A. I have already explained the neumes and called attention to the fact that they do not give time value, and likewise in their orig-

inal form they lacked a fixed and determinate gauge, such as a line or series of lines, for facilitating the reading of their value.

Nevertheless, they were and are notations, inasmuch as they gave instructions for singing and are capable of translation into other notations, such as staff notation. If they were not notation,
167 it would have been impossible to translate or transcribe them into staff notation.

Neumes, indeed, afford the only record or notation which we have of some ancient music. They were provided for use as notation only. In their time they were the only musical notation so far as is now known.

The perforated music sheet, record or notation ought to be learned as readily, and when read would offer more information than the neume notation, because not only would the positions of the note perforations, like the positions of the neumes, at a certain period of the development of neume notation, indicate the relative values of the notes, but the lengths of the perforations and the spaces between the perforations in the direction of their progression would indicate duration of notes and lengths of intervals between them.

As I several times have had occasion to say in this deposition, a perforated music sheet constitutes a record which is superior to any other for accuracy and fullness of information, if made by a recording machine operating automatically during the playing of a musical composition, and hence, no comparison could be made favorable to the neume notation between the latter and the perforated music sheet.

Q. 15. If you differ from the reasons given by defendant's witnesses, referred to in the previous question, state how and why?

A. I have no doubt that perforated note sheets can be read as notation by persons who have sufficiently studied them, and that for simple music the task would not have been very difficult. If readable for simple music only, they would constitute notation. Even if one notation offers less facility than another for reading, the question whether it is notation cannot for that reason be negatived.

168 With the aid of a rule or templet reading of perforated music sheets is rendered much easier. This fact is, however, indeterminate, because analogous aids have been used for beginners in studying staff notations. If the playing of a piece of music recorded on a perforated music sheet will make the subsequent reading of it easier, this also is indeterminate of the question, because the same is true of even staff notation.

Perforated music sheets are like the records or notations produced by automatic recording machines, which I have discussed elsewhere, and at least when similarly produced, they are the best records or notations possible to be made.

As I have explained more fully elsewhere, perforated music sheets constitute the only record or notation which is of utility for some music, namely, for such music as cannot be played manually with two or even four hands.

Considered from the standpoint of momentary value, perforated

music sheets, like pieces of staff notation, are directly and solely dependent upon the popularity of the recorded music. Their uses are the same as those of staff notation; so much so, indeed, that where they are used, the staff notation is unnecessary; they operate differently only in that they translate directly to the keys of a keyboard instrument instead of through the mind of the player to the keys. Even though they mainly operate upon the keys directly, yet they convey to the mind of the player much information which he may use to advantage in giving expression to his playing; but to determine that they constitute a notation it is enough, in my opinion, to show that they record music so that it may be preserved, and so that it may be translated or transcribed into any other notation, such, for example, as staff notation.

Lengths of perforations indicate time value. Notation is
169 not dependent upon any bars, and this is true even of staff notation. A person familiar with this perforated sheet notation knows that four quarters and not five are a measure. He knows that slots of the same length or nearly so indicate notes of the same time value. Slight variations in length are easily accounted for as some slots may be slightly lengthened for effect, as for legato playing. I cannot at all agree with the stand taken by defendant's witnesses in regard to pitch. If a melody is written in staff notation, for example, on the upper or treb*el* staff, and by mistake the bass cleff is written on this staff, a skilled musician can immediately tell that the sequence of notes will not produce a musical melody, and likewise a skilled musician can tell the same thing from the perforated sheets.

Defendant's witnesses are absolutely antagonistic to what has been so carefully stated by numerous inventors of music-recording devices, which were upheld by the experts in the Patent Office by granting the patents. A piece of music has been published in staff notation from a record produced by the composer, who played on a piano connected with a recording machine, while composing. And from the perforated record thus made the staff notation was transcribed for publication. It is evident that the perforated record was readable, as otherwise the staff notation could not have been made, as the composer produced the perforated record and it only.

Q. 16. State the uses of perforated music sheets?

A. They are used for various kinds of musical instruments, such as organs, orchestrions, automatic pianos, automatic piano-playing machines, such as the Pianola, and for operating string instruments.

They have also been used for accompanying vocal and instru-
170 mental solos, and I myself have heard the tenor, Herr Burgstaller, of the Metropolitan Opera House, and others so accompanied, and have read that Mme. Nordica, Edouard de Reszky, Lillian Blauvelt and other singers and artists have been so accompanied. I have also read that Josef Hoffmann, at Carnegie Hall, played manually a piece which he learned solely by playing it with the Pianola, using a perforated music sheet. They have also been used for playing dance music.

Q. 17. It seems to be evident that somewhere in a self-playing

mechanism of musical instruments used in conjunction with a perforated music sheet there must be a record or notation of a musical composition. Please state whether or not it is anywhere else than in the perforated music sheet, and whether a perforated sheet could operate the mechanism without producing music.

A. Of course in producing music by means of a self-playing musical instrument in conjunction with a perforated music sheet, there must be a record or notation of a musical composition, as otherwise the musical composition could not be played.

The perforated music sheets are copies or pieces of music; are sold as "music," and various manufacturers advertise and catalogue them as such, stating that by means of them all music, accompaniments, solos, etc., can be played as well as by hand.

The perforated sheet is useful to a player by informing him of the number and kind of notes which are about to be played, thus enabling him to gauge the wind pressure and the speed accordingly, and thus produce much better effects.

Perforations can be so arranged as to cause the operation of self-playing mechanism to its fullest capacity mechanically, and yet produce only discordant noises; hence it is only the record or notation of music due to the *arrangement* of the perforations which is of value playing music.

171 In other words, the playing of music depends entirely upon the fact of whether there is or is not a *musical* record or notation on the perforated music sheet.

Q. 18. According to your experience, has the use of perforated music sheets been increasing or decreasing? State this not only as to the entire number of perforated music sheets, but also as to the use of perforated music sheets for different classes of instruments?

A. The use of perforated music sheets has increased vastly and is still increasing, and such perforated music sheets are not only used with self-playing mechanisms which are not parts of musical instruments, but also on self-playing mechanisms which are included in pianos and organs, with or without additional keyboards, being used even in large and expensive organs erected in the houses of wealthy people, in churches, and in concert halls. Although manual playing is still being taught extensively, yet comparatively the number of persons using musical instruments is rapidly increasing with regard to the self-playing instruments, so much so that manual playing is not being taught to so large a proportion of affluent people capable of affording it as in the past. This is not only due to the number of perforated sheets which are sold outright, but there are a number of circulating libraries which lead to very extensive uses of perforated music. Such extensive uses certainly must have great tendency to lessen manual playing.

The making, selling and hiring of perforated music sheets has reached such proportions as to constitute the sole business, or at least a distinct branch of the business of many large concerns; for example, the Aeolian Company, Apollo Company, Perforated Roll Company of Schenectady, New York; W. W. Kimball of Chicago,

Illinois; Auto Music Company of New York, and Chase and Baker of Buffalo, New York.

172 The use of the perforated music sheet is the interposition of a new simplifying agent between a person desirous of playing and a musical instrument, and this new simplifying agent provides for the production of musical compositions by persons having little knowledge of music. By this use are made possible performances far better than those produced manually by the average player. It therefore makes the learning of manual playing unnecessary; taking away from ordinary persons not having special musical talents all incentive for learning to play manually. To the musically learned and unlearned it offers opportunities for playing music without that great expenditure of time which is necessary for manual playing.

By thus making the learning of manual playing unnecessary, a perforated music sheet puts music before the public upon a scale materially greater than was possible before its use.

Self-playing mechanisms, designed for use with perforated music sheets, are coming into the market in vastly increasing numbers, as preference for playing with perforated music sheets increases.

It seems to me evident that the recompense to the composer will constantly and rapidly be reduced relatively to the entire mass of music sheets sold if it can only be obtained from music recorded by staff notation, and by the tonic-sol-fa system, and eventually must become so extremely slight that composers will not have that stimulus for further efforts which will insure production of music of merit in the quantity in which it was formerly furnished.

Furthermore, if perforated music sheets shall not be protected under the Copyright Law, it would be possible for unscrupulous or careless persons to mutilate or mistranslate musical compositions by placing them before the public so as to throw such discredit upon the musical compositions that they will not be wanted in any notation.

173 Q. 19. Is all music for which perforated music sheets have been made susceptible of being rendered or performed manually. If not, state your reasons?

A. No; not all such music can be performed manually, because sometimes more keys are required than the two hands of one can play, or the two hands of two players can control, and on the other hand, in organ music especially, where there are two manuals and a pedal, so many notes may be called for that human beings could not manipulate all the proper keys. On the other hand, some music is so written that the trebel and bass are played at the same time and certain notes are played midway between, or the music is so written that while the fingers of the two hands act on certain keys, other keys are played in rapid succession and in a manner which could not be produced by the hands.

I have myself played on an automatic instrument a composition by Mr. Homer Bartlett, which could not under any circumstances be performed by any single or any two human beings on a piano, except of course, by the use of a mechanical musical instrument or

playing mechanism. The composition is an exceptionally fine, brilliant and forcible one, and of great beauty. Such music has a beauty and fullness of tone of its own; in fact a new character, and is valuable and desirable, and will probably be much used, as it permits of producing magnificent tonal effects which could not be produced by manual playing, and hence has not been produced heretofore, either by one or two persons playing on the same or on two pianos.

I have seen and examined the score of this composition referred to above, and from which the perforated music sheet was made, and found that some parts require five and six staves for properly
174 expressing them in staff notation, and, of course, it is evident that no human being could read such a score while attempting to play it.

Q. 20. Are you familiar with an instrument called Metrostyle. If so, please explain it, and state what bearing, in your opinion, it has upon this case?

A. The Metrostyle consists of a pointer attached to the speed controlling lever of a mechanical playing machine, and is used with a perforated music sheet provided with a line running its entire length, and deviating from right to left, according to the variations in speed which it indicates as being necessary. The player shifts the speed controlling lever in such a manner that at all times the pointer coincides with this line. This line is drawn on a master, or original, perforated sheet, by the composer or by a person who is a musical authority, and who is highly skilled in the playing of the music in question, and if the player keeps the pointer at that line, he will, in order to do so, be moving the speed regulating lever to the right or left, and thereby increase or decrease the speed of the playing in exact accordance with the intentions of the composer or the interpretation of the person who has drawn this controlling line. The Metrostyle makes use of a high grade of perforated music sheets.

The Metrostyle cannot be used with ordinary staff notation as there is no speed device to be controlled.

Q. 21. Compare the best record possible to be made by staff notation with the best record possible to be made by automatically recording a musical composition, at the time of playing, on a perforated music sheet?

A. In a previous answer I have fully indicated the best possible staff notation, and shown its insufficiencies. The best record possible to be made on an automatic recording machine is perfection, as it records everything that the composer does. An automatically
175 made record shows on its face all fine distinctions in the length of time in holding notes.

Q. 22. Please state how little is sufficient to constitute musical notation?

A. I have already referred to a number of exhibits to show the various stages of musical notation of about a thousand years ago, and I have also referred to numerous patents showing various styles and forms of musical notation, which are more or less perfect.

Any mark, sign, indication, or any information given by any

means that conveys information by means of a record, and which is sufficient to give instruction and information how musical compositions, or the tones composing them, are to be produced in succession, is musical notation.

Q. 23. Compare a record consisting of ordinary staff notation with a perforated music sheet of the same composition with reference to the result upon a musical instrument, *e. g.*, one having a keyboard?

A. In each case keys are operated as parts of a mechanical action for the purpose of producing the sounds of a melody. In both cases the production of the musical sounds is determined by a musical record. The musical record in both cases determines the sequence of the musical sounds, their time value and the times of intervals between the musical sounds. With staff notation the information given passes into the mind of the operator, and by his mind is in turn directed to the fingers so that the fingers perform such actions requisite for producing the desired music.

With the perforated music sheet, record or notation, the operation of the keys is accomplished without the same mental work of the player.

Q. 24. Has the direction of the sequence of note records
176 relatively to the length of the sheet upon which the same are recorded anything to do with determining the absence or presence of musical notation?

A. Nothing whatever. The notation of the ancient Hebrews was read from right to left and the Chinese musical notation is read vertically. Their linguistic writing is also read respectively from right to left and vertically; yet this does not affect its value as a record.

Q. 25. Are you acquainted with any aid for determining the notes of keyboard instruments or a perforated music sheet. If so, state the facts, and also add a statement of your opinion as to whether the fact that some advantage may be had from such an aid affects the character of the device for which the aid is used?

A. The keyboard of a piano or organ has white keys, for producing whole notes or tones, and black keys for producing the half tones. In each octave of the keyboard there are seven white keys and five black keys; the latter in two groups of two and three respectively; the black keys being located between the white keys. It is well known that beginners find it very difficult to find the proper key on a keyboard, and if white and black keys would not be provided in groups as stated above, it would be as difficult to find a certain key on the keyboard as it is to find the duct corresponding to a certain note on a tracker board of a pneumatic instrument using a perforated music sheet.

Various devices are used for facilitating the determining of the notes of a keyboard instrument on the keyboard, and I call special attention to U. S. Letters Patent No. 229,365 to J. D. B. Black, previously referred to in which each key has a characteristic mark corresponding with the notation. Patent to D. Fallon, No. 391,887, of October 30, 1883, shows the keys marked to correspond with the notation. The patent to G. Pilar de Pilchau, No. 507,840,
177 which I have already discussed, shows in Figs. 14 to 17 on sheet 6 of the drawings a transposing rule, which is to be used

in transposing the music. Likewise, the German patent No. 13,928, to Kurka, shows the use of a transposing rule, made in imitation of a keyboard and shown at *x z*, Fig. 5 of the drawings of this patent. The patent states that function of this transposing rule is to assist in transcribing the record into ordinary staff notation, and thus it is an aid to reading the perforations of a perforated music sheet, which the patent also states. The rule is passed over the sheet lengthwise of the latter, or the sheet is drawn under the rule.

U. S. Patent No. 210,888 to G. Woods, Dec. 17, 1878, shows an index or imitation keyboard past which a music sheet or record sheet passes, and this index indicates the musical value of each mark or slot very clearly and is thus a great aid in reading the notation on said sheet.

A templet consisting of a T-square has been used for transposing perforated sheets made on a recording machine into staff notation, and I have used such a rule. This T-square had marked along its edges the positions of the slots on the perforated sheet in such a manner that when this T-square or rule was placed properly and transversely on the perforated sheet, the marks coincided with the centers of the slots. Each mark bears an inscription corresponding to the musical value of the corresponding slot, and by moving the rule or T-square over the perforated sheet, or the sheet under the T-square in the direction of the length of the sheet, the musical values of the slots can be read successively.

If the markings on such a rule or templet, corresponding or relating to the black keys, are extended lengthwise over the perforated music sheet, they will also be a great aid in reading the notation on such sheet.

178 I have seen and used a perforated music sheet in which the perforations, instead of consisting of circular holes or slots, were made in the shape of letters which corresponded to the tones represented by the perforations, so that in place of rows of perforations the sheets had rows of letters corresponding to the sequence of the notes on the keyboard. A person observing such sheet can easily tell what notes are being produced and can readily read such notation.

As already stated, most, if not all, piano players have a habit of marking by means of a pencil the extreme high and low notes of ordinary staff notation which they find in the composition; that is, they mark on the paper the name of the notes. This marking is merely an aid or a time saver, so that while playing the player does not have to count the ledger lines to ascertain the exact musical value of the note, and thus is not interfered with his rapid or even playing.

The character of the device for which an aid to reading is used cannot be at all affected by the use of such aid, because the device, that is, the record, is a musical record, and the transposing rule or other aid is only provided as a time saver. The notation is precisely the same whether the rule or other aid be used or not used.

Q. 26. State whether or not there has been any musical record or musical notation which would enable anybody unlearned in the playing of keyboard instruments, and unfamiliar with the arrangement

of notes on the keyboard of such an instrument, to manipulate the keys suitably for playing a musical composition. If so, state the character and form of such musical notation?

A. Such a record is shown in U. S. Letters Patent No. 210,888 to G. Woods, of December 17, 1878, to which I have already referred briefly.

179 The musical record or notation is produced on paper ruled in the direction of its length, so as to correspond exactly with its keys, and to be in line therewith; and is also ruled transversely to indicate time. This notation would be as large as a portion of the keyboard, if the notation is to be limited to a portion of the keyboard only. An index, or imitation keyboard is provided, past which the music sheet is moved at a proper rate of speed by clock work, or other mechanism provided for the purpose, and all that the operator has to do is to put his fingers upon those keys of the instrument which correspond with the representations on the index or imitation keyboard, and to maintain them there as long as each and any of the marks on the sheet music approach the front edge of the index, so as to retain such keys down until the end of each mark on the music sheet disappears behind the front edge of the stationary index, or imitation keyboard.

The patent says:

"We will suppose, in the present instance, that the horizontal rows or fields in the sheet represent quarter notes. In that case a note printed on the whole vertical extension of any single space would represent that the key opposite has to be held down one-quarter of a full note. If one-half of the field is printed on, it would represent an eighth note and so on in proportion. This may also be accomp-ished by the marks of the notes only, as a blank sheet without the aforesaid fields, rows or spaces. After the music sheet and roll are set in motion, all that the operator has to do is to put his fingers down on the keys of the instrument that correspond with the representations on the index or imitation keyboard as soon as each or any of the marks on the sheet music approach the front edge of the index, and to retain such key down until the edge of each mark on

180 the music sheet disappears behind the front edge of the index. It is immaterial what kind of marks or figures are used on the music sheet, or whether the fields be plain or colored, or whether such fields are used at all."

The marks or lines on the Woods music sheet thus move toward the index, directly above the keys, and then disappear behind the index, in the same manner that the perforations of a perforated music sheet approach the tracker-board and then disappear from view.

I call particular attention to the fact that this inventor, who obtained his patent in 1878, calls his record sheet music, although it is not written in staff notation, and although it is to be wound upon a roller in precisely the same way as the note sheet of a mechanical playing instrument, or the note sheet of the recording devices which I have discussed.

Q. 27. It has been testified in this case that mechanisms for play-

ing musical instruments have been differently made, so that a perforated music sheet which could be used with one might not be used with another. State whether or not there is any inherent necessity for such a difference, and whether any such difference would affect any of your testimony as to uses possible for perforated music sheets?

A. Such difference would not in any way affect any of my testimony as given. I know from experience that various manufacturers use different tracker-boards, and consequently the spacing of the slots in the perforated sheets in transverse direction is different, but that does not affect in the least the value of the perforated sheet as a musical record. Of course, if the spacing of any perforated music sheet does not correspond with the spacing of the
181 tracker-board of the instrument on which such perforated sheet is to be used, it cannot be used for playing on this special instrument, but provision has been made for a universal tracker-board, so as to adapt instruments to respond to the perforations of perforated music sheets different from those spaced the same as the ducts of the instruments.

Q. 28. Can you give some idea of the proportion of music which is now in vogue, and which is not copyrighted?

A. That I cannot say positively. No classical music is copyrighted, and a vast amount of the popular music is not copyrighted. There is no doubt in my mind that by far the greatest amount of the "best music" is free from copyright.

Q. 29. Have you taken the defendant's perforated music sheets charged in this case to be infringements and compared them with the staff notations of the compositions to which they relate. If so, with what result?

A. I have made such comparison and found that the perforated record or notation of the defendant's music sheets agrees with the staff notation of the compositions in question.

Q. 30. Have perforated music sheets been copyrighted in the United States?

A. They have been. I have examined the records and the deposited "copies" in the office of the Register of Copyrights at Washington, D. C., and there found records of such copyrights and the deposited copies, which latter were perforated music sheets. I know that the owners of copyrights for such perforated sheets license others to publish as staff notation the compositions recorded only on such perforated sheets.

Complainant's Counsel offer in evidence the following:

Printed Patent Office copy of U. S. Letters Patent, 122,096,
182 to F. W. Acee, "Musical Notation," issued December 26, 1881, and the same is marked "Complainant's Exhibit, Acee patent, Jany. 20, 1904, J. A. S. Ex'r." Also

Printed Patent Office copy of U. S. Letters Patent No. 229,365, to J. B. D. Black, "Method of Marking the Keys of Keyboards for Musical Instruments," issued June 29, 1880, and the same is marked "Complainant's Exhibit, Black Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

Printed Patent Office copy of U. S. Letters Patent, No. 391,887, to

D. Fallon, "Method of Musical Notation," issued Oct. 30, 1888, and the same is marked "Complainant's Exhibi*bit*, Fallon Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

Printed Patent Office copy of U. S. Letters Patent No. 429,841, to C. Clements-Kropp, "Musical Notation," issued June 10, 1890. and the same is marked "Complainant's Exhibit, Clements-Kropp Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

Printed Patent Office copy of U. S. Letters Patent, 482,442, to J. W. Robberson, "Musical Notation," patented Sept. 13, 1892, and the same is marked "Complainant's Exhibit, Robberson Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

Printed Patent Office copy of U. S. Letters Patent No. 608,771, to C. C. Guildford, "Musical Notation," issued Aug. 9, 1898, and the same is marked "Complainant's Exhibit, Guildford Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

Printed Patent Office copy of U. S. Letters Patent No. 663,512, to G. L. Peterson, "Music Notation," issued Dec. 11, 1900, and
183 the same is marked "Complainant's Exhibit, Peterson Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

Printed Patent Office copy of U. S. Letters Patent No. 149,593, to J. Metzger, "Automatic Music Recorders," issued Apr. 14, 1874, and the same is marked "Complainant's Exhibit, Metzger Patent, Jan'y 20, 1903, J. A. S., Ex'r." Also

Printed Patent Office copy of U. S. Letters Patent No. 210,888, to G. Woods, "Note Indicator for Musical Instruments," issued Dec. 17, 1888, and the same is marked "Complainant's Exhibit, Woods Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

Printed Patent Office copy of U. S. Letters Patent No. 227,101 to L. A. Fernow, "Musical Recording Attachments for Keyed Instruments," issued May 4, 1880, and the same is marked "Complainant's Exhibit, Fernow Patent, Jan'y 20, 1904, J. A. S. Ex'r." Also

Printed Patent Office copy of U. S. Letters Patent No. 507,840, to G. Pilar De Pilchau, "Melograph or Music Recording Attachment for Pianos," issued Oct. 31, 1893, and the same is marked "Complainant's Exhibit, Pilar De Pilchau Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

Printed Patent Office copy of U. S. Letters Patent No. 549,057, to J. N. Cantelo, "Music Recorder for Pianofortes," issued October 29, 1895, and the same is marked "Complainant's Exhibit, Cantelo Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

Printed Patent Office copy of U. S. Letters Patent No. 722,904, to L. O. Rissman, "Apparatus for Recording Music," issued March 17, 1903, and the same is marked "Complainant's Exhibit, Rissman Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

184 Printed Patent Office copy of German Letters Patent No. 13,928, issued July 12, 1881, to R. W. Kurka, "Apparatus for Recording, by use of Electro-Magnetism, the Notes Produced on Key Musical Instruments," and the same is marked "Complainant's Exhibit, Kurka German Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

A Translation of this Kurka German Patent, and the same is

marked "Complainant's Exhibit, Translation of Kurka Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

A Printed Patent Office copy of German Letters Patent No. 37,081, issued September 24, 1886, to P. Boehm and F. Juliusberger, "Improvements in Devices for Automatically Recording Playing on Musical Instruments," and the same is marked "Complainant's Exhibit, Boehm and Juliusberger Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

A Translation of this Boehm and Juliusberger Patent, and this same is marked "Complainant's Exhibit, Translation of Boehm and Juliusberger Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

A Printed Patent Office copy of German Letters Patent No. 88,123, issued September 13, 1896, to E. Schneider, "Device for Automatically Recording Musical Peices Played on Key Musical Instruments," and the same is marked "Complainant's Exhibit, Schneider German Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

A Translation of this Schneider German Patent, and the same is marked "Complainant's Exhibit, Translation of Schneider
185 German Patent, Jan'y 20, 1904, J. A. S., Ex'r." Also

Three photo-engraved copies of plates taken from the work known as "Memoire sur Hubald et sur Traites de Musique, par E. de Coussemaker, Paris, 1841," and the same are marked respectively "Complainant's Exhibit, Neume Plate No. 1, Neume Plate No. 2, and Neume Plate No. 3, Jan'y 4, 1904, J. A. S., Ex'r." Also

Sketch produced by witness Gunz, of Treble and Bass Staff, and the same is marked "Complainant's Exhibit, Gunz. Sketch of Notation, Jan'y 20, 1904, J. A. S., Ex'r." Also

A Piece of Music, a musical notation for the blind, and the same is marked "Complainant's Exhibit, Specimen of Musical Notation for the Blind, Jan'y 20, 1904, J. A. S., Ex'r." Also

The Automatic Musical Recording Machine, referred to by witness Gunz, and the same is marked "Complainant's Exhibit, Paine Recording Machine, Jan'y 20, 1904, J. A. S., Ex'r." Also

A Specimen of Musical Notation for a Xylophone or Metallophone, referred to by witness Gunz, and the same is marked "Complainant's Exhibit, Xylophone or Metallophone Music or Notation, Jan'y 20, 1904, J. A. S., Ex'r." Also

A Xylophone or Metallophone, referred to by witness Gunz, and the same is marked "Complainant's Exhibit Xylophone or Metallaphone, Jan'y 20, 1904, J. A. S., Ex'r."

186 NEW YORK, N. Y., *Jan.* 20, 1904—141 Broadway.

Cross-examination of OSCAR F. GUNZ:

Present: Mr. Chas. S. Burton, Mr. Edward S. Evarts, Counsel for Defendants.

Mr. Edwin H. Brown, Mr. Louis C. Raegener and Mr. Alex. P. Browne, Counsel for Complainants.

By consent of counsel, objections to the direct-examination having been reserved until the conclusion of the same, counsel for defendants note their objections as follows:

Questions 3, 4, 5, 6, 9, 10, 11, 13, 16, 18, 19, 23, 24 and 29, and the answers thereto, are objected to as not rebuttal, and the accumulative of matter testified to by complainants' witnesses in *prima facie* case.

Question 17 is objected to as not competent and not rebuttal, and the answer thereto as not responsive and not competent and not rebuttal.

Questions 20 and 21, and the answers thereto, are objected to as not rebuttal, irrelevant and improper attempt to use the Court as a medium for advertising.

Question 30, and the answer thereto, are objected to as incompetent, impertinent, and as not rebuttal.

Notice is hereby given that motion will be made in due time to take from the record all that matter objected to.

Cross examination without waiver of objections:

X Q. 31. Do the neumes referred to in your answer to Q. 4, shown in the earliest writing or compositions in which they are used,
187 differ materially in their function from rhetorical inflection marks to indicate parts of which the voice of the reader or reciter should be allowed to rise or fall, so giving what is commonly called the rising or falling inflection?

A. As far as I now remember these inflection marks they would differ radically from the neumes, and would not give the information given by the neumes.

X Q. 32. Will you explain somewhat the difference between the rising and falling inflections noted by rhetorical inflection marks and the change of voice or intonation noted by the neumes?

A. Rhetorical marks are used exclusively for speaking, and with the object of emphasizing certain words or phrases, for the purpose of making a more distinct and pronounced impression upon the hearer. The neumes were not used for this purpose, but were used for showing and indicating changes in pitch, and also in time value, to a certain extent, in chanting or singing. Furthermore, I found no inflection marks for spoken words that were used at the time the neumes were used.

X Q. 33. Is the change of voice or intonation which constitutes a rising or falling inflection a change of pitch?

A. To a certain extent it is, if the word pitch can be applied in a non-musical sense.

X Q. 34. If the reader is employing what would be called a musical tone of voice, and observing the inflection marks, would these marks for rising or falling inflection, and circumflex inflection with the changes of voice or intonation, amount to changes of pitch, using the word "pitch" in the common ordinary sense and not in the sense of the phrase concert pitch?

A. A reciter or speaker at times would use his voice in a manner that is commonly known as in the higher pitch, but that is
188 only the common use of the word as clearly distinguished from its musical use. A person reciting or speaking in a "musical tone of voice" still would not be producing music, as the

word "musical" is there only used in an illustrative manner, and is not used in the sense as defining the vocal production, as music.

X Q. 35. Using the word "pitch" as indicating the characteristic of a sound as being high or low, is it not possible to ascertain and state the pitch in which a spoken word is uttered as definitely as in singing?

A. Not unless musical notation is used. The pitch of bells, steam whistles, and like noise-producing devices is always indicated by means of musical notes.

X Q. 36. Assuming, of course, that some conventional mode of designating the pitch must be adopted in order to state it, cannot the pitch of the voice of a reader, or the pitch of any particular word or part as uttered, be as accurately noted and stated as the pitch in which the word is uttered in singing?

A. I do not know of any such conventional mode, and have never heard of it.

X Q. 37. Is not the common method of designating the notes or tones produced by the keys of common musical instruments, using the letters of the alphabet from A to G, with other modifying words such as sharps and flats, a conventional mode of stating pitch of different sounds or relative pitch of those sounds, as applicable to spoken words as to sung words; for example: does not the pitch of different voices in the ordinary conversation, what would be called the ordinary pitch of the voice, of different persons, differ in degrees which may be expressed by using this conventional mode of stating pitch?

A. In answer to X Q. 35 I said that the pitch in which a spoken word was uttered cannot be defined as definitely as in singing unless a musical notation is used. If this musical notation is used for this purpose, means are used which are radically different from the rhetorical inflection marks.

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X Q. 38. Without regard now to the means which might be used to present to the eye the differences in pitch of different spoken words, is it a fact that the same speaker or reader may at different parts of his speaking or reading utter the words at different pitch, and change the pitch in the utterance of a word, so that one portion of it will be uttered in one pitch, and another portion will be uttered in a different pitch?

A. Almost all speakers and actors do this, but they do that according to their own intuitions or understanding or conception of the word spoken; they do not follow any printed marks, and no two actors or speakers would make the same changes of pitch in the same manner, in the same place, and to the same degree, as the individuality of each speaker or reader, or actor, always asserts itself.

X Q. 39. Are not rhetorical inflection marks commonly called the rising inflection mark, the falling inflection mark and the circumflex inflection mark, when employed in writing or printing, intended to instruct the reader as to the proper changes of pitch to be used in reading, so as to make the reading express the particular shade of proper emotion which the person who applies those inflection marks considered to be best fitted to the sense?

A. These inflection marks are commonly used in school books, so

that the inexperienced reader may have some guide, but they only vaguely indicate the changes of pitch to be used, and give very indefinite information, so that a large number of persons might strictly follow what instructions the marks give, and yet the result of following such instructions may, and in all probability will, be different for each person.

190 X Q. 40. In the case of the earlier neumes which are employed without any line, or mark responding to a line, for indicating a definite starting point for the pitch, as in Plates 1 and 2 produced by you in your answer to Q. 4, is not the information or instruction conveyed by the neumes so lacking in definiteness that different persons attempting to follow these instructions might produce the chant or intone the reading quite differently in respect to pitch?

A. No, I understand not, because these neumes—that is to say, the musical notations by means of neumes—have been translated into staff notation, and I have seen and examined a number of such translations, and I have compared such translations in various works and found them to agree.

X Q. 41. Do you understand that there is anything in the Plates 1 and 2, either in the form or other characteristic of the neumes, to indicate a definite starting point for the pitch variations which the neumes denote or suggest. If so, what?

A. No, I cannot find any, but I am not skilled in reading neume notation. The person who made the translation which I read and examined, and who must have been skilled in reading neume notation, evidently found something to serve as a starting point.

X Q. 42. Have you any of these different translations of the same neume writing which did not have any line to indicate the starting point for the pitch variations, or can you state where two or more translations into staff notation of this same neume writing may be found?

A. I don't remember all the translations of the neume writing that I examined, because there were so many. They can be found in the Musical Library of the Lenox Library, on Fifth avenue, New York, where I found them.

X Q. 43. Did your examination go to the extent of ascer-
191 taining whether in all cases different translations of the same neume writing agreed. Or did you find any instances in which two translations of one neume writing were different in respect to pitch?

A. I don't remember finding any two translations which were different in regard to pitch. I found translations of certain neume writings in various publications published in different countries, in different languages, and at different times, and found some neume translations in several of these works, and as a matter of curiosity compared them to see if they agreed in general. That is as far as my comparison went.

X Q. 44. If there was nothing to indicate a starting point for pitch variations in such neume writings as contained on Plates 1 and 2 of these exhibits; and if notwithstanding the lack of any such

indication two translators derived the same results, this would indicate that the addition of the line for denoting a starting point, such as the line marked "F" in another plate, was probably merely the visible expression of a conventional understanding which obtained among the readers and writers of these neume writings in which the line was not used, would it not. Otherwise, how do you account for the identity of the translations?

A. Yes, that is my understanding.

X Q. 45. So that, in fact, the translators of these neume writings arrive at uniformity of result, but assuming something which rests in tradition only and was not really a part of the neume notation itself they were translating?

A. That I don't know, and I do not know how the translations were made. The translations were evidently made by persons highly skilled in the writing of music, in harmony, counterpoint, general bass, and other musical sciences, and to a person highly
192 skilled in such musical sciences, any gross deviations would become apparent, and by the process of such substitution and elimination he could, in greater or less time, produce a standard or key which would serve as a basis for making the translation in about the same manner as the expert in secret writing, by careful study, arrives at a key or at a basis for a key, by means of which this secret writing can be deciphered. At least, that is my understanding of the manner in which the neumes were translated, and from books that I have read on the subject I am led to believe that my views are correct.

X Q. 46. Are you certain that any of the instances in which you found substantially identical translation into staff notation of the same neume writing, were instances of neume writing devoid of the line or corresponding indication denoting the starting point for the pitch variations; that is, were such neume writings as shown in Plates 1 and 2 of the exhibits?

A. I am not. As I at the time examined a large number of neume writings and translations, I know that some of the translations were from the earliest neumes without lines.

X Q. 47. If the information or instruction conveyed by these earliest and least complete systems of neume writing did not contain anything for the starting point for the pitch variations, leaving that to the musical judgment or preference of the reader, to select according to the natural pitch of his voice, is there any difference except in degree between these neume systems for denoting variations of pitch and the systems of rhetorical inflection marks for instructing persons learning to read, in respect to changes of pitch for the voice called inflection. If so, what is the difference, the essential character?

A. There is a vast difference; the rhetorical inflection
193 marks are used, as I have stated, for the instruction of persons learning to read, and that is about all the function they have. The neumes are part of a well-developed system of musical notation which was not used only for teaching persons to sing or chant, but, on the contrary, it was used for the purpose of giving

professional singers such information that they may need for the purpose of always singing a certain chant in the same way, and so that others who may wish to sing this chant at a subsequent time may sing it according to the same melody as did the person who originated the melody.

X Q. 48. The neumes were used to instruct persons who knew how to read the words of a chant in respect to a particular mode of intoning those words, not because the intonation was of necessity such as indicated, but because with that intonation they better expressed the thought, or contributed to the emotion or emotional excitation, which some expert in that matter conceded it should be the purpose of the reading or intonation to arouse, and so that a number of persons reciting the words in unison might adopt the same intonation for maintaining and completing the emotional effect. Am I correct in this, according to your view?

A. I have not found anything in all the books I have read in support of your views. I do not understand that the neumes were used for the purpose of instructing persons how to read the words of a chant. I understand that they were used for the purpose of designating the rising and falling of musical sounds, so that the persons using neume notation could sing, and the neum-s were used for the purpose of designating just how they were to sing, even if they were acquainted with the melody, just as a skilled musician to-day, or up to a few years ago, used musical notation even if he knew the musical composition by heart. To that extent they in-
194 structed. I do not understand that the neumes were used for the purpose of better expressing the thought of the words. That is something quite modern, and Richard Wagner was really the first to bring this to perfection and to advocate it in his musical compositions. History shows that from time immemorial music was made use of in the religious rites of the various peoples, but I do not find any record that the music was so composed as to have any direct relation to the expression of the thought. Some of our very best music prior to the second half of the last century disregards entirely the thought to be expressed by the words, and in fact is independent of the word although the word and the musical sound are produced together, and as I have intimated before, that it was only among the composers of more modern times that the idea of adapting the musical sounds to the thought expressed by the word has been developed to such perfection as we find it among modern composers—I mean the composers of the last half century or the present day.

Recess.

X Q. 49. In my last question I used the word "instruct" in the sense of inform or give information or direction, and I understand you to say that in this sense, or "to that extent," the neumes were intended to instruct. Was it not part of the purpose of the neum-s, as of any means for denoting how sounds are to be uttered, to enable a number of persons reciting or intoning in concert to do it in the same manner as to inflections or changes of pitch?

A. Of coure if a neume notation gave any information to a single person, and I understand it did, it would give the same information to a number of persons, each having the same neume notation before him, and of course if each followed the instructions or
195 information given by the neume notation, then they all would produce the same musical sounds and in the same succession, in the same manner as a number of persons singing the same chorus in concert from ordinary modern staff notation would all sing the same way.

X Q. 50. Is not one of the purposes of the rhetorical inflection marks of which we have been speaking, to enable a number of persons reading or reciting in concert to do so with the same inflections of voice at the same parts of the composition, and in what respect is there any difference except as to degree, between the functions of the neumes for enabling a number of persons to chant in concert, and the functions of the inflection marks to enable a number of persons to read or recite in concert?

A. While it is a fact that a number of persons sing in concert, I don't know or have not heard of persons reading or reciting in concert excepting school children, and there the inflection marks would be of some aid, but, from my experience as a teacher, I am satisfied that the main information that the children derive is from the teacher and not from the inflection mark, for if the teacher relied upon the inflection mark alone the result would be highly unsatisfactory, as experience taught me. However, even assuming that such speaking in concert were to be made use of; for example, in the reproduction of a Greek drama, or some dramatical works based upon a Greek drama, the actors composing the chorus would be guided more by the instruction of a great actor than by the inflection mark. But even in such case there would be a great difference between the instruction of neumes as they were used in old times, and the use of the inflection mark. The inflection mark, if used for anything at all, is used for reciting, whereas the neumes were used for music or chanting, and chanting is a form of music clearly distinguished from reciting. The priest, in reading
196 from the Scriptures, recites, but in chanting the responses, or in the Mass, he sings and produces musical sounds by means of the voice, as distinguished from the sounds in speaking. It is not a difference of degree but a difference of kind.

X Q. 51. As I understand you then, the difference which you consider essential in determining between such a system of notation as the neumes constitute, and such a system as that of the common system of inflection marks is that the former is employed for denoting variations of pitch of a character and throughout a range such as to constitute music, and the latter is employed to indicate variations whose character and range has a purpose different from the purpose of music; is that a correct statement of your view?

A. Yes; but I wish to add that the neume notation constitutes a musical record from which at any subsequent time the musical composition, such as it is can be repeated. The inflection marks are not

such a record, as they are merely occasional indications for emphasizing certain words. They are more in the nature of the Italian words used in staff notation for the purpose of indicating how certain parts shall be executed.

X Q. 52. As I understand, the early neume notation is adapted to indicate the trend, so to speak, of the pitch, up or down or in monotone, and does indicate the variations of pitch to such extent as might be presented to the eye by a sinuous line with more or less abruptness of sinuosity or changes of direction, and that the musical judgment of the performer skilled to some extent in music would enable him to interpret these indications consistently with a pleasing effect; and I understand that the similarity of interpretations by different persons upon the same neume writing is possible by reason of the musical judgment which they would all bring
197 to bear in such interpretation. If you understand the neume notation to have been in these earlier forms more or less exact than I have indicated, will you please state whether it is more or less so?

A. Of course the person to whom the neume musical notation was addressed was expected to have musical judgment and also musical experience, and it was by means of this musical judgment and experience that he was enabled to understand the neume notation, and by its aid perform the composition accordingly. The earliest specimens of neume notation of course relied more upon the musical judgment of a performer than did the later neume notations, or even the modern staff notation, in which great reliance must be placed upon the musical skill and judgment of the performer. In order to sing or play according to any musical notation, the performer must not only be able to understand what the musical notation intends to convey, but he must also be able to execute that which has been conveyed to him by such notation, and in executing it he must not only make use of his skill in execution but also of his musical judgment in order to be able to determine whether he is executing that which is conveyed to him by the musical notation, correctly or not, and must also use his musical judgment in ascertaining whether he has or has not read the notation correctly or not. All musical performers, professional or otherwise, are apt to make mistakes, caused either by careless reading or imperfect execution, and it is their musical judgment which comes into play when executing that conveyed to them by the musical notation. The better the musical judgment is, the less will be the percentage of errors. And so I understand it to have been the case with neume notation.

X Q. 53. What is the shortest interval or duration of a tone that can be noted by the common staff notation?

198 A. I believe a sixty-fourth.

X Q. 54. The method employed by this system, however, permits and contemplates further division by two and the indication, therefore, of 128 notes, if desired, does it not?

A. I don't believe there is any reason why the interval may not be

made 1/128, or if so desired, 1/256, but I believe and am quite sure that 1/64 is the practical limit both for a musical sound or for an interval. There are, perhaps, possibilities that some player may be able to perform music in which there are intervals of less than one sixty-fourth, but such cases would be certainly exceedingly exceptional and, no doubt, beyond the comprehension of the general musical public.

X Q. 55. The staff system of notation then is adapted to and contemplates the representation of the shortest note and shortest interval and of the least difference between the length of different notes and intervals which it is supposed the ear may appreciate or the voice or the hand execute; is that correct?

A. Yes, that can be done but, of course, at the expense of clearness in writing, as even the 64th note and rest are rather complex figures.

X Q. 56. Would any composer writing his composition in ordinary staff notation, with eighths as the shortest notes and interval and the shortest difference between different notes and intervals, reasonably expect the performer, following his notation to interpret him as meaning, for example, sixteenths duration for one note written as an eighth, and a three-sixteenths duration for another note also written as an eighth?

A. No, for if he had so designed he would have written the notes accordingly in staff notation.

X Q. 57. Would it be equally true, that if he wrote his musical composition in 1/32 note as the shortest, that it would not be
199 reasonable for him to expect a performer to interpret one of his 32nd notes as a 64th and another as 3/64, since he could have written them so if he so intended them to be interpreted?

A. Yes, that is correct.

X Q. 58. In your answer to direct question 15 you say "lengths of perforations indicate time value"; of what are you speaking in that sentence?

A. Of the perforated music sheet. I mean that the length of the perforations in the sheet indicate or designate the time value of the note expressed by such perforation or slot.

X Q. 59. Is it to be understood then, that in translating or transcribing from a perforated note sheet into staff notation, and finding four slots or perforations, the second twice as long as the first, or substantially so, the third three times as long as the first, and the fourth four times as long as the first, if you represented or translated the first one by a quarter note, for example, you would represent the second by a half note, the third by a dotted half, and the fourth by a whole note, and would regard that as a correct interpretation or translation?

A. If they all started on the same line, I would, and so I found it in the numerous patents that I have referred to in my direct testimony.

X Q. 60. What do you mean by all starting on the same line?

A. I mean that the ends of the slots are on one and the same transverse line, namely: the ends that first arrive at the trackerboard.

X Q. 61. In case of slots of lengths related to each other as I have indicated but which did not start on the same transverse line, would you be without any means of translating them as to the relative duration to be indicated by the notes of the staff notation?

200 A. Their time value would always be the same as in the first case mentioned, but under certain circumstances they would be represented by different characters in staff notation, for example: the half note by means of a quarter note in one bar or measure, and the balance of the half note by a quarter rest in the succeeding bar or measure.

X Q. 62. Under what circumstances would these two different modes of indicating what you would consider the time values be employed, and how would you determine which form of representation was correct?

A. One would be as correct as the other for its specific purpose. If the half note ended at the end of a bar or measure, it would be designated by a half note in staff notation within such bar or measure; but if the half note on the perforated sheet and having the same time duration as the half note ending with the measure, would be partly in one measure and partly in another, it would be expressed by a quarter note in one measure, and by a quarter rest in the next.

X Q. 63. What other circumstances or conditions can you point out, under which you would represent differently in staff notation that which was represented or indicated by two slots of the same length in perforated sheets, besides the case in which the measure division would cut across the slot?

A. Of course I understand that these two half notes do not begin at the same point. A half-note slot within a measure can also be indicated in staff notation by a quarter note and a quarter rest, or if for reasons not known to me, the person may wish to express in a more complex manner, he might use an eighth note and 3/8 rest to make up the half note, or in fact, might use any way of expressing in staff notation the fact that this note is to be played at a certain time and to be held for the duration or length of a half note.

201 X Q. 64. I understand, then, that if you had a perforated music roll to translate to the best of your ability into staff notation, if you found a dozen slots of substantially the same length at different parts of the roll, you would represent them in staff notation by characters of some kind, either notes or rests, which in all instances have the same total footing at the time value. If you made a half note for one of these slots, you would use characters for each of the others whose time value would aggregate that time value; and that for all slots having the length substantially half of the first group, you would, in the staff notation, use characters aggregating the time value of quarter note; and similarly for all slots which you might find having each a length substantially twice of those of the first group, you would use, in staff notation, characters having the time value equal in the aggregate for each to that of the whole note. Do I correctly understand you?

A. That is correct for each independent slot, but sometimes it does happen that notes which are to be held for a time greater than that expressed by a whole note require a slot longer than can be made in one continuous piece, and a small or narrow bridge of paper is left at one-half of the length of said slot, but this bridge is so narrow as not to have any effect in playing by means of this perforated sheet. In such cases, of course, I would not express in staff notation the musical value of each section of said slot, but the musical value of the entire slot; likewise, it is sometimes necessary to slightly reduce the length of a slot in order to leave a sufficient bridge between the end of the slot or perforation, and the beginning of the next slot or perforation as to cause the interruption of, or break in, the musical sound.

X Q. 65. With these two exceptions, I understand then, the rule to be as I have stated?

202 A. Yes, and that is the information which I have derived from the patents on automatic recording machines which I have previously referred to, from my knowledge of the use of such automatic recording machines.

X Q. 66. Then you are not speaking of the perforated music rolls of commerce or such as are used in the automatic musical players of the time, or do your statements apply equally to them?

A. I am, because these perforated music rolls or sheets of commerce are identically the same thing as the records produced on and by the automatic recording machines, and such records, produced on such automatic recording machines, can be used for making staff notation or can be placed directly into an automatic playing machine and used for making music on a piano or other instrument.

X Q. 67. Is it to be understood then, that if there were a perforated sheet or roll for controlling an automatic player or musical instrument, of which your answer to X Q. 64 would not be true, and the method of whose construction and co-operation with the player which it controlled did not require or permit it to be true, all your testimony as to the value or quality of a perforated roll as a notation and of its translatability into ordinary staff notation would not apply to such a roll?

A. I cannot answer that question, because I don't know what kind of a roll you have in mind. If it is a roll of music sheet which will properly produce or play a piece of music by means of an automatic playing machine, then it can be translated into staff notation. Likewise, if it is a music sheet purposely so cut, prepared, or mutilated so as not to play a proper piece on an automatic playing machine, but only produces a jumble of cacophonic sounds, it still can be translated into staff notation, and this staff notation,

203 if played, provided it is within the physical capability of a player, would also produce such cacophonic jumble of sounds. A perforated sheet produced by means of an automatic recording machine is an exact record of the piece played on the recording machine, and the length of the slots or perforations are in exact and precise proportion to the time the keys of the recording machine were held depressed, and therefore, by noting the lengths of the slots

produced in the sheet and making a representation of the time values, succession and interval of these slots by means of the characters used in writing staff notation, a correct representation of this slotted sheet, the staff notation, would be produced.

X Q. 68. Should I understand, from your answer to the last question, that you do not know whether or not such a roll as I indicated in that question would be one to which your testimony as to the translatability of perforated rolls into ordinary staff notation would apply?

A. I don't understand just what kind of a roll you mean in your question, but perhaps I can make myself understood if I say that any perforated music sheet which in itself is correct can be translated into staff notation.

X Q. 69. Do you mean that in the sense that if two persons independently translating it should produce in staff notation results different, that one or both of them must be wrong?

A. I do, for the same reasons that if two persons play the same composition on two recording machines, each person manipulating one machine, and the note sheets produced are not identically the same, one of the persons played the composition either incorrectly, or both played it incorrectly; provided, of course, that both the recording machines are in perfect order and working at the same speed.

X Q. 70. I take it that you mean to be understood that you
204 consider a perforated sheet or roll such as indicated in my X Q. 67 is a logical impossibility; do you so understand?

A. No, I don't even understand that, for I can form no picture in my mind of the roll that you have in view.

X Q. 71. Then you don't know whether such a perforated roll such as I have indicated in that question would or would not be one to which your testimony as to the translatibility of perforated roll into staff notation would apply, do you?

A. I can't answer that question, because, as I have stated, I cannot form any picture in my mind of the roll in question, and until I have such picture in my mind, or the roll before me, I cannot answer the question one way or the other.

Adjourned until Thursday, January 21, 1904, at 11 o'clock.

141 BROADWAY,
NEW YORK, *January* 21, 1904—11 a. m.

Met pursuant to adjournment.
Counsel present as before.

Cross-examination of the witness, Mr. OSCAR F. GUNZ, continued:

X Q. 72. Do you mean to be understood by your answer to X Q. 66, as saying that there are no perforated music rolls or sheets of commerce, that is, that are sold as controllers for automatic players or automatical musical instruments, which are not "identically the same thing as the records produced on and by the automatic record-

ing machines," to the extent necessary to make your answer to X Q. 64 true in respect to them?

205 A. Perforated music sheets are made and sold which are not identically the same with perforated sheets made on an automatic recording machine because these sheets which I have first referred to in my present answer contain a musical record which could not be produced on an ordinary recording machine as this record contains so many slots and the slots so arranged that this composition could not be performed manually by one or two persons, for example, notes would have to be played at or near both ends of the key-board and at the same time other notes at the center which, of course, would be impossible manually, or certain notes are held and would have to be held by the fingers in manual playing, but at the same time other notes running into the held notes are played, and, of course, this would be impossible manually. In so far that the slots in this last-mentioned sheet for playing which is impossible manually corresponds exactly to the time value of each note, this manually impossible sheet, is precisely like the sheet made by the automatic recording machine, because in the sheet made by the automatic recording machine the length of the slot also corresponds exactly and precisely to the time value of the note.

X Q. 73. Do you mean to be understood then that as to the correspondence between the lengths of the slots and the time value of the notes which should be written in staff notation all commercial perforated rolls sold for controllers or automatic players and the like are "identically the same thing as the records produced on and by the automatic recording machines"?

A. I have already called attention to the fact that in making the perforated note sheet from staff notation, or even in making copies of perforated note sheets from the original made on the recording machine, some notes are occasionally lengthened or shortened a trifle for the purpose of overcoming structural difficulties or avoid-

206 ing structural weakness. In a note sheet made on an automatic recording machine no provision, of course, can be made for such structural changes, whereas, in preparing a slotted sheet from staff notation, such provision can be made. Otherwise, they are identical. I also call attention to the fact that these variations only occur occasionally. I also call attention to the fact that some compositions are rearranged slightly in making a perforated sheet for staff notation, either for the purpose of overcoming structural difficulties or for elaboration, or simplification, which, however, does not detract from the value of the sheet as a musical record. I will also not deny that occasional errors may creep in, and such errors are also found in practically all staff notation.

X Q. 74. But with these trifling and immaterial exceptions, you would answer my X Q. 73 in the affirmative, would you?

A. Yes, I think I would.

X Q. 75. Are you familiar with the methods actually followed by those whose business it is to lay out the perforated rolls for cutting, or to cut the same otherwise than by the usual automatic mechanism?

A. I don't know that I am familiar with all systems or methods, as the arrangers usually consider that as a secret of their own. I am acquainted with the system adopted by a person who did "write" slotted sheet music quite extensively, but not for any person concerned in this litigation. His method was practically the same as that disclosed in the several patents which I have referred to. He also made certain slight changes to overcome structural difficulties such as I have stated before, and was compelled to resort to this expedient quite frequently as the paper at his disposal was far from perfect, but his great musical knowledge enabled him to con-
207 ceal these expedients so that they would not be noticed in the use of the sheet and would not seriously affect, if at all, the musical record.

X Q. 76. Is that the only method or system, or the only person whose method or system for arranging perforated rolls you are familiar with?

A. That is the only person I actually saw make the music. The arranging of music was performed in a like manner by the arranger of another concern as I was informed by this party, but I never saw him actually perform the work. At the time I was speaking of, there were only three concerns, as I was informed, in the United States who actually prepared slotted music sheets.

X Q. 77. And you are not familiar then with the method or system employed in the arranging and cutting the rolls or perforated sheets which are involved in this suit, are you?

A. I don't know who made the sheets involved in this suit.

X Q. 78. It is to be understood, I take it, that you have never had any practical experience then as an arranger or cutter of perforated controlling sheets for automatic musical instruments?

A. I wouldn't like to say that, for while I did not actually operate the cutting machine for the purpose of making sheet music which was to be actually used, I did operate a machine very frequently and to considerable extent, and it became necessary, for reasons having nothing to do with the present litigation, for me to become thoroughly acquainted with all machines used for making slotted music sheets, and I managed to become acquainted with pretty nearly all except those used by the Aeolian Company. Furthermore, I did actually arrange music for parties in whom I was then interested, for the purpose of demonstrating the capabilities of a slotting machine which was then being perfected. I also made a lengthy study of the arranging of music for music-box cylinders and disk, and
208 also the arranging of piano music on disks to be used for playing an instrument known as the "Pianette," which is a small automatic piano in which the playing mechanism is operated directly by a metal disk having teeth or projections; otherwise the instrument differs radically from the piano so far as the arrangement of the strings and the succession of their musical value are concerned. I have operated an automatic recording machine a number of times within the last few months and also several years ago, and the sheets made on such automatic recording machine were then placed in a playing attachment or machine.

X Q. 79. By cutting machine in your last answer, do you refer to the machines for cutting the perforated rolls in quantity after a master or equivalent device has been first produced for use in the cutting machine?

A. Both to machines of this kind and to a hand machine for making the master sheet either direct from the staff notation or according to marks made in pencil on this first or master sheet.

X Q. 80. My question 78 was intended to refer only to the arranging or laying out in the first instance, of the perforations, whether done by marks or by cuts, as I used the word "cutting" so as to include both methods of the original laying out. With this understanding, will you please state whether or not you have had any experience, and if so, how much and what sort, in laying out perforated sheets?

A. I have answered all this in my answer to X Q. 78, as my experience relates to the making only of the master sheet. I brought in the machines for making the sheets in quantities to show one of the reasons why it became necessary for me to make myself acquainted with the method of making the master sheet, because at
209 the time the parties had in view a machine which would serve as well for making the master sheet as for furnishing quantities, with slight changes in the machine.

X Q. 81. I understand you then, to say that your experience in laying out master sheets has been such as you acquired in investigating the methods employed and has not been in employment or making masters for actual use in manufacturing commercial rolls; am I correct?

A. Only partly so; I was not actually employed in making master sheets for actual use for manufacturing perforated sheets, but I did more than merely investigate, as I actually arranged music although this arrangement was not used for practical purposes; it could have been.

X Q. 82. And the actual arrangement that you did for such purpose as it was put to, did you do according to the system adopted by the person mentioned by you in your answer to X Q. 75, which you say was "practically the same as that disclosed in the several patents" which you have referred to?

A. Yes, according to one of his systems; he also used another system, which I was not capable of using as my musical abilities were not sufficient.

X Q. 83. Please mention all the different "machines used for making slotted music sheets" with which you have become thoroughly acquainted, as stated in your answer to X Q. 78?

A. That I can't do, as these machines are the property of a firm competing with others whose patents on these machines have not yet been issued.

X Q. 84. You are speaking of machines used for making rolls in quantities, I take it?

A. Yes; the machine for making the master sheet was patented June 17, 1902, by H. M. Salyer.

X Q. 85. I understand that this is the only master cutting machine with which you are familiar?

210 A. It is the only machine I am acquainted with for the exclusive use of cutting master sheets, but I am acquainted with machines which are to be used for both purposes, namely: for cutting sheets in quantities or cutting a single sheet. The machine is adapted to use a master sheet or could be operated manually for the purpose of cutting a master sheet or a number of sheets independently of the master sheet. The cutting operation of the machine was the same in all cases, the only difference being that in making a master sheet, the cutting device only went through a single thickness of paper, whereas in making a number of sheets, it went through a number. Now I come to think of it, I am acquainted with still another machine, or plan of a machine, for making a master sheet, but this machine I did not see in operation—only parts of it. It is not yet patented.

X Q. 86. Is it a fact that in all machines with which you are familiar, which can be used for cutting master sheets without any previous laying out, that is, so that the laying out is substantially done in the cutting, the method is such as you have referred to in your answer to X Q. 75 as being practically the same as that disclosed in the several patents you have before mentioned?

A. Practically the same.

X Q. 87. How did you make the comparison stated in your answer to Q. 29, of the perforated music sheets charged in this case with infringement, with the staff notation of the compositions of which they are said to be infringements?

A. I made a templet which extended across a perforated sheet which showed the musical value of each perforation, and I also used a T-square, provided on its edges with marks corresponding to the centers or longitudinal axes of the perforations, and then I moved the perforated sheet under the templet or T-square, and noted

211 the musical value of the perforations and compared it with the musical value of the note indicators of the staff notation, and ascertained the normal length of the slots for the different time values, and compared the time values of the notes with such normal lengths for the different notes of different time value.

X Q. 88. Did you have the staff notation before you when you performed this process, and did you make your comparison from perforated sheet to staff notation as you went along, or did you first without the note sheet translate, or attempt to translate, the perforated sheet and then make the comparison of your translation with the staff notation of the composition as written by the composer?

A. In the beginning of this comparison I compared note for note of the perforated sheet with the staff notation, and then later on, after I had become better acquainted with both the staff notation of this particular piece and the perforated sheet, I compared vertical lines or rows of notes in the staff notation with the transverse group of slots or perforations in the perforated sheet, and later on I compared measure by measure, the staff notation with the perforated sheet. In another case I started in with the perforated sheet, and

from the same prepared the staff notation and then compared the staff notation which I made with a printed copy of the piece of music in staff notation.

X Q. 89. By another case, what do you refer to?

A. I mean that I merely took perforated sheets and made a staff notation for my own amusement; it was not in another litigation.

X Q. 90. You mean that you took another perforated roll of those which are charged to be infringements, and made the translation first independently of the staff notation and compared it afterwards?

A. I did make the staff notation first and compared it afterwards with the printed staff notation, but it was not one of the rolls here in suit; it was one of Sousa's marches.

212 X Q. 91. In your entire preparation of the translation into staff notation of the perforated roll in suit you had the original copyrighted staff notation before you for comparison, either note by note, measure by measure, or bar by bar, as you might find convenient, did you?

A. Yes, sir.

X Q. 92. You were also familiar, were you not, with the musical composition presented in the copyrighted staff notation before you began this process—before you proceeded far with it?

A. I played it on the piano once, and also once on the Pianola, but I did not remember the melody.

X Q. 93. To what extent were you familiar with Sousa's march which you translated into staff notation from the perforated roll, as you have stated?

A. I had heard the march before, but could not play it by heart, nor could I hum the melody, and I had never before seen the staff notation.

X Q. 94. You were sufficiently familiar with it to recognize its various phrases as they occurred in listening to it, so that in a common way it was familiar, but not familiar enough for you to play it without the score; is that about the fact?

A. That is about right. I would recognize the march if I heard it played.

X Q. 95. What do you mean in your answer to X Q. 87 by ascertaining "the normal lengths of the slots for the different time value?"

A. Slots representing musical notes of the time value of musical notes are not all of precisely the same length for the same note, speaking only of time value now, throughout the sheet. They are sometimes lengthened slightly for the purpose of producing the legato effect mainly on music for the piano, and sometimes they are slightly shortened to overcome structural difficulties, and sometimes they are shortened for effect. An examination of such a perforated sheet will show that there is a normal length for each time

213 value. The same applies to music made on the automatic machine.

X Q. 96. I infer, then, that the variations of the actual effects from what you term the normal lengths of the slots for a given length of time value, or a multiple of such unit, would be what you

would term "slight," or, as you say sometimes, slightly lengthened or slightly shortened for the reasons and purposes you have mentioned, is that correct?

A. Yes, with the understanding that the word "slightly," which, at best, was not very definite, and includes any variation that does not alter the musical composition.

X Q. 97. Your being entirely ignorant of the musical composition presented by the perforated roll, and not having the staff notation of it before you, or in your mind, and you were undertaking to translate the perforated roll into staff notation, having thus no knowledge of what the musical composition might be, how would you go about it to ascertain whether a certain long slot, for instance, was a slot made long in such manner as not to change the musical composition?

A. In the first place, the slotted sheet itself would give me the musical composition, and if I knew nothing of staff notation, or nothing of music, I would not attempt to make a staff notation from a perforated sheet. A knowledge of staff notation is not merely knowing that there are five lines and leger lines, and that black heads represent certain time value, and white heads other time value. It requires a knowledge of harmony, composition and other musical sciences to make a perfect staff notation. If the person making the staff notation from the slotted sheet should by mistake give a certain slot a time value either too great or too small, he would discover in the staff notation which he is preparing that he
214 has put in too much or too little, and his musical knowledge would instantly show him the mistake. It is precisely in the same manner that in copying manual writing or deciphering manual writing that we come across a letter, a word, or even a phrase, which apparently is incorrect, but if we give this letter, word or phrase one meaning of two or more that are possible, the word, phrase or sentence at once becomes intelligible. In order to make such corrections, or to obtain the correct understanding of manual writing, or to discover errors in printing, the person attempting to read this matter must be fully conversant with it, must have a thorough knowledge, as otherwise he would not discover the discrepancy or error, and would not have at his command the means for rectifying it. A person not acquainted with the terms, expressions, symbols, etc., used for example in chemistry, would not be able to discover glaring errors in a treatise relating to chemistry, whereas a person fully conversant with such terms, and having a thorough knowledge of the certain matter under consideration, would at a glance read correctly and if there was an error discover the error. In the same manner, a skilled musician in reading such a slotted sheet would at an instant discover the true meaning of such a slot, whereas the tyro might be puzzled for days or forever.

Recess.

X Q. 98. Leaving out as much of the mystery as you are willing to omit, please explain how it is that "in the first place the slotted

sheet itself would give me the musical composition" before you have made your translation of it?

A. I did not mean to say that the slotted sheet would give the musical composition before the translation was made, but on the contrary, the translation from the slotted sheet would give the composition. If there is any doubt as to the exact value in time
215 of any slot, this could be easily ascertained by reading the staff notation prepared from the sheet, and in the manner previously described, such error, if error there was, could be discovered and corrected.

X Q. 99. Then you mean that if your translation as first produced contained at a given point a note of a certain length, which according to your musical judgment ought not to be of that length, you would "correct" your translation by changing the note to one of the length which you thought ought to be there; do I understand you correctly?

A. No; in such case I would certainly consult the perforated sheet from which the translation was made, and first ascertain whether I had observed the length of the slot correctly, and would compare it with the length of one or more other slots representing notes of the same time value under certain conditions, and then if I found that a similar slot in a similar combination in other parts called for a note of a certain value, I would give this slot that value, of course always within reasonable limits. There always remains a possibility and the probability that errors may have crept in in making the perforated music sheet. Errors occur in staff notation, and they are just as apt to occur in perforated music sheets, and the same as we take due consideration of the errors in staff notation, there is no reason why we should not take the same consideration of error in slotted music sheets.

X Q. 100. When you speak of comparing the length of the slot "with the length of one or more other slots representing notes of the same time value" do you mean other slots which you have translated by notes of the same time value; if not, what do you mean by representing notes of the same time value?

A. I am assuming now that these corrections are made after the entire piece or sheet has been translated into staff notation,
216 and, therefore, a certain time value given to slots of a certain length, and I would make comparisons for the purpose of ascertaining whether or not a certain note which I might think was incorrect was correct or not.

X Q. 101. If, for example, you had by the method you have undertaken to explain, arrived at what you would consider the normal length of slot for say a quarter note, and found it, for example, a quarter of an inch, and in some places had translated a certain slot an inch long by a whole note, in the staff notation, and if, according to your musical knowledge, a whole note would be out of place and a quarter note would be proper according to your judgment; if, upon re-examination of the perforated sheet you found no error in your measurement or observation of the slot, and if, upon comparing it with the length of one or more other slots, which you had

translated by whole notes, and which you found apparently correctly so translated, according to your musical judgment you found it to be substantially the same as these others which you have treated as whole notes, what would you do in respect to correcting your translation: put in a quarter note which you thought ought to be there and regard the long slot as an error in the perforated roll or something else?

A. I would leave the translation into staff notation in accordance with the slotted sheet, and then play the melody with this apparent error, and if the melody would seem incorrect it would show that my musical judgment was wrong; but if, on the other hand, if upon playing I would find that the staff notation made in direct accordance with the slotted sheet that was wrong, I would be satisfied that a mistake had been made in cutting the sheet and I would correct the staff notation as it should be. In doing this I would be guided not merely by musical judgment but also by the rules governing bars and measures of music.

217 X Q. 102. Then such a variation in length as from a quarter of an inch to an inch in the length of a slot for a note of the same time value would not be a variation such as you would include under the word "slightly" or "slight," as you have used those words to indicate such variations as might be expected to arise from the causes you have mentioned?

A. No, I would not, as a rule; but in making translations into staff notation from sheet produced on an automatic recording machine, the differences in length might be much greater than ordinarily, but I don't know whether they would be as great as you have mentioned in your *answer*. In transcribing from a note sheet made on an automatic recording machine, the comparison of the length is not made between note slots very remote from each other in the direction of the length of the sheet, but such comparisons are made with note slots near each other, because the paper winding machines have a uniform speed, and the player sometimes plays slowly and sometimes rapidly, and that, of course, would produce some difference in the length of the slots.

X Q. 103. These sheets perforated on an automatic recording machine are used as masters or as patterns for making masters for making commercial perforated rolls, are they?

A. Sometimes they are.

X Q. 104. Do you consider such automatically made perforated sheets or the rolls made from them to be high grade perforated sheets?

A. I don't know; I haven't looked into that matter.

X Q. 105. You say, nevertheless, in your answer to Q. 21, that the best record possible to be made on an automatic recording machine is perfection; is there some doubt on your mind if perfection in a perforated music roll is short of high grade. Which do you intend to be the higher term?

218 A. A record made on an automatic recording machine is the best that can be made, better than any notation of any other kind, and it is therefore high grade as a record. It may re-

quire some modification as a playing sheet, because there is a possibility that for playing purposes some of the fine points of recording may have to be ignored for structural reasons. For the same structural reasons it may be possible that a sheet made on a recording machine cannot be used directly as a master sheet and may even require considerable modification in its structure, without in the least destroying its musical value.

X Q. 106. Then you recognize the possibility of a big difference structurally between a perfect record in the form of a perforated sheet, and a perfect or even a good musical instrument controller in the form of a perforated sheet.

A. No, I do not. That difference is merely the use of a little paper as binder occasionally to prevent the sheet from tearing easily and to cause it to fit well on the tracker-board.

X Q. 107. Does a Metrostyle of which you have spoken make use, or can it make use, of perforated rolls produced by an automatic recording machine or made from a sheet so produced?

A. I see no reason why not, provided the machine was provided with a governing line for the Metrostyle, if the latter is to be used.

X Q. 108. The governing line which you speak of is the line to indicate the movements to be made by the proper finger which is connected with the speed-controlling device, is it?

A. Yes, sir.

X Q. 109. Did I correctly understand you, that the paper-winding mechanism in the automatic recording machine travels at a uniform speed?

A. Substantially uniform.

X Q. 110. And that the purpose of the automatic record-
219 ing machine, or one purpose, is as you seem to state in answer to Q. 21, to "record everything that the composer does," by which I understood you to mean everything that the person manipulating the recording machine does in expressing his composition to that machine. It that correct?

A. Yes, expressing it by means of the keys which are depressed or not depressed.

X Q. 111. And this would include the expression in the resulting perforated record of the varying sped at which the performer played different parts of the composition; would it?

A. It would.

X Q. 112. From this it would result, if I understand you correctly, that a note of a given length as it would be expressed in staff notation would be represented by a shorter slot when the musician was playing rapidly than when he was playing slowly; is that correct?

A. Yes, so I understand it.

X Q. 113. Then if the perforated sheet were provided with the governing line corresponding to the same variations of speed as the musician or composer used in operating the automatic recording machine, please explain how the result would be other than a doubling of the variations?

A. I don't see where the doubling of the variation could come in.

The speed which the musician played on the recording instrument has nothing whatever to do with the governing line after the perforated music sheet has been made, in any way, shape or manner, the composer or some person having a thorough knowledge and understanding of the composition and how it should be played, places the same into a playing machine and plays it at the proper speed, and while so playing the line is drawn on the sheet, the shape of the line depending entirely upon the movements of the speed-controlling device necessary to produce the speed of movement required to play the melody as it should be played.

220 X Q. 114. Then, if the composer who has so expressed his intention as to the variation as to speed in operating the recording machine as to produce an automatic record as perfect as possible, has correctly expressed his own composition, the player or expert who should take the record thus produced and caused the controlling mark to be made upon it in accordance with his playing, he would either have to counteract what the composer had done, or if he caused the record thus used to produce the composition as the composer did, his controlling line would be a straight line running longitudinally to the shape; am I right?

A. No, I don't understand it that way at all. The composer plays on the recording machine or on a piano connected with a recording machine, and the recording mechanism takes the record; this record is then placed into a playing machine and the speed regulator of the playing machine is so controlled that the sounds will be produced at the same speed as they were produced when the melody was played on the piano with which the recording machine was connected, and while so running the sheet through the playing machine the line is automatically drawn which serves to guide others in regard to speed when subsequently used in the slotted sheet.

X Q. 115. Do you deny, or state your opinion as to whether it is or is not true, that if the person controlling the player in which one of these automatic records is being used, causes the music to be played in the same way as to variations of speed as the composer played it in connection with the automatic recording machine to produce such automatic record, the governing line resulting would be a straight line?

A. No; it would be a line having more or less curvatures to the right or left, but would be practically a continuous line, and that is the very purpose of the line, to prevent the player using such

221 a sheet from changing the speed in such a manner as to spoil the particular composition.

X Q. 116. What do you mean by a continuous line?

A. I mean the line which does not swerve very much to the right or to the left.

X Q. 117. What would the deflections to the right or left indicate, if anything?

A. Variations in speed.

X Q. 118. Would they not indicate variations from the speed at which the composer played at the same point?

A. Yes, they would; but it would still be the Metrostyle line and would serve just the same purposes as the Metrostyle line, which deviates considerably to the right or left.

X Q. 119. That purpose would be better accomplished, would it not, by omitting the line entirely and thereby avoiding the misleading deviations and merely marking the piece as to be played at unvarying speed; if not, why not?

A. That might seem to be a good solution, but it seems that persons like the other style better. Furthermore, a composer may play a composition at a certain speed, and subsequently upon hearing it played again, he might decide that the music would be beautified by changing the speed from his original conception, and the Metrostyle line would permit him to do this.

X Q. 120. Are there any Metrostyle lines on the perforated rolls in suit?

A. No, sir; I believe these rolls were made before the Metrostyle was put on the market.

Examination of witness closed.
Signature waived.

222 HOMER N. BARTLETT, a witness produced on behalf of complainant, testifies:

Q. 1. What is your name, age, residence and occupation?

A. Homer N. Bartlett; 57 years; New York City; organist and composer.

Q. 2. About how many musical compositions composed by you have been published?

A. I believe the opus number is 215 published work, and various styles.

Q. 3. I show you a certain roll marked "Nov. 21, 1903," bearing your signature, and ask you what it is, and what it represents and how it was produced?

A. I recognize my signature to the roll as an improvisation which was made in the mechanical automatic device which recorded perfectly my thought. It is an improvisation which represents spontaneous melody conceived by me at the time.

The roll offered in evidence is marked "Bartlett Improvisation; Complainant's Exhibit."

Q. 4. Who were present when you composed this piece and performed the same?

A. A gentleman who operated the device and Mr. Young were present.

Complainants' counsel offers in evidence a Librarian's Certificate dated December 10, 1903, and the same is marked "Complainants' Exhibit, Copyright of Bartlett's Improvisation."

The paper offered in evidence is objected to as incompetent, irrelevant and immaterial.

Q. 5. I show you a paper entitled "Improvisation," Homer N.

Bartlett, published by Wm. A. Pond & Co., and ask you if you recognize it, and, if so, to state what it is?

A. This is unquestionably a record of the improvisation
223 made by me in the mechanical device in November 21, 1903.

Q. 6. This record now in your hand and to which you have just referred is a record of the same musical composition offered in evidence as "Bartlett Improvisation, Complainants' Exhibit," is it?

A. It is.

Q. 7. Now, in what form is this record now in your hand?

A. It is in staff notation used for the piano forte; it is merely a translation of the perforated paper which transcribed perfectly my ideas when I made an instantaneous record of thought in the device.

The paper offered in evidence is marked "Complainants' Exhibit Bartlett's Improvisation in the form of Sheet Music."

Objected to as irrelevant and immaterial.

Q. 8. Who made this translation from the perforated roll record into the sheet music record?

A. I can't tell you; I don't know that.

Q. 9. At the time that this sheet music record of your improvisation was made, was there in existence any other record except "Bartlett's Improvisation, Complainants' Exhibit," being in perforation?

A. There was not.

Q. 10. Did you have anything to do with the translation of your musical composition from the perforated roll into the sheet music form?

A. I had not.

Q. 11. I now show you a manuscript score and ask what it is?

A. A composition made especially for the Pianola or self-player, and one which contains difficulties which could not be performed by two hands, by any performer or even two performers; the reasons are obvious, because extended in such a manner that the fingers could
not play them at one time. The elaborations of themes are
224 so complicated that no performer could reproduce the elaborations on a keyed instrument. The opportunity which such an instrument offers to a composer to elaborate and develop his ideas is a great advance in musical notation, for it gives him a wider scope for the development of his ideas, and consequently, a means of notation which would elaborately and rightly convey these thoughts shows an advance in musical notation. The intermingling of the elaborations of the themes are so arranged that no player could possibly produce them with the fingers.

Score offered in evidence as "Complainants' Exhibit Bartlett Manuscript Score."

Q. 12. I show you a perforated roll and ask you to tell us what it is?

A. This perforated roll represents the composition which I made into staff notation for the Pianola. I would say the staff notation

on Bartlett Manuscript Score would not be easily read by ordinary players, for the reason that it is written on several staffs, which were necessary in order to get all the ideas which the composition is designed to portray.

The roll offered in evidence is marked "Complainants' Exhibit Bartlett Andante Grazioso Roll."

Q. 13. Did you ever hear this musical composition of yours rendered upon a musical instrument?

A. I never heard it except when it was played to me on the Pianola.

Q. 14. And did the Pianola, by means of this roll, correctly reproduce your musical composition?

A. It did.

Q. 15. What experience, if any, have you, that justifies
225 you in saying that this composition entitled "Introduction and Andante Grazioso" could not be played upon the organ or piano?

A. It is too complicated to be rendered by any single performer or even two performers. I was educated as a concert pianist, and for many years I have played and taught. I have been organist for forty years in New York.

Complainants' counsel offers in evidence Librarian's Certificate of the musical composition last referred to, and it is marked "Complainants' Exhibit Bartlett Copyright Andante Grazioso."

The exhibit offered in evidence is objected to as incompetent and irrelevant, not being identified with the subject-matter of the suit and not with any other or any pertinent matter of evidence therein.

Q. 16. Will you please tell us whether the composers in the past recognized the difficulties of recording their extempore improvisations, and if so, what is the advantage of the instrument upon which you caused your improvisation to be recorded?

A. The composers of the past certainly recognized the fact that the means of bringing their thoughts quickly in intelligible form were inadequate. As an illustration I might recount the story of Tartini, the celebrated violinist composer of the past; one night he had a remarkable dream, in which his Satanic Majesty appeared to be his servant and willing to do his bidding. He asked him to play the violin. The devil took up his instrument and played in so marvelous a manner that the sleeper was entranced, and he awoke under the excitement and found paper to put down immediately what had been played to him by his satanic majesty. He found
that he could not begin to portray one half of the ideas that
226 came to him in his sleep. Now, had he possessed an instrument such as we have in the shape of the mechanical device used by the Aeolian Company, he could undoubtedly have taken down for the benefit of the world his thoughts in harmonies that were revealed to him. He did attempt to put this on paper, but was so dissatisfied with the result that he was ready to commit suicide.

The entire deposition of this witness is objected to as not rebuttal but merely cumulative upon points pertaining to the *prima facie* case.

Cross-examination without waiver of objections:

X Q. 17. I notice in this perforated roll "Complainants' Exhibit Improvisation," a large number of perforations which are either wholly closed up by pasters or partly closed up by such pasters. In which form is it the record of your improvisation, the form which it had before the perforations were closed by pasters, or its present form?

A. I should say its present form, for this reason: When first playing the instrument it was with a little hesitancy, the recording device being so accurate, the slight overlapping of the fingers would cause a tone to sound which I did not intend to sound. Now, that has to be regulated so as to get the note just as the composer intended. That undoubtedly accounts for the pasting up of the apertures. The accuracy of the machine is such that if a composer happened to strike a wrong chord, it would be of course reproduced. Now, the wrong chord was not intentional and was a slip, if he should happen to strike a wrong chord.

X Q. 18. Who made the corrections in this roll indicated by the pasters and by the additional apertures which appear in some places?

A. I don't know anything about it.

227 X Q. 19. How did you ascertain that this perforated roll was a correct record of your improvisation, and when did you ascertain it in respect to the time when the corrections by pasters were made?

A. My improvisation was immediately reproduced upon the Pianola after I had played, and it was satisfactory, just the way I played it, and I have heard no subsequent performance of it.

X Q. 20. You ascertained and decided that it was a correct and satisfactory reproduction of your improvisation then, before any corrections by pasters, etc., had been made upon it? Is that correct?

A. It was a very satisfactory representation of what I had played. That must have been before any corrections were made, as I only heard the roll played as soon as it was taken from the instrument.

X Q. 21. Have you compared the staff notation of this improvisation "Complainants' Exhibit Bartlett's Improvisation in the form of Sheet Music," with the composition itself, either as remaining in your memory or as presented on the perforated record made automatically, note by note, to see that it is a correct staff notation of that composition?

A. I haven't compared the two, but have no doubt of the correct representation of the way I played it.

X Q. 22. Upon what do you rely for that conclusion in respect to which you say you have no doubt, if you have not made a comparison?

A. On my memory; I have played that over since its publication, and as I remember, it seems to be an accurate representation of that played in the mechanical device.

Deposition of witness closed.
Signature waived.
Adjourned to Jan. 22, 1904, at 11 a. m.

228 141 BROADWAY,
NEW YORK, *January* 22, 1904—11 a. m.

Met pursuant to adjournment.
Counsel present as before.

JACQUES FRIEDBERGER, a witness called on behalf of complainant, testifies:

Q. 1. What is your name, age, residence and occupation?
A. My name is Jacques Friedberger; age, 33; occupation, that of musician and composer, pianist; residence, 428 Park avenue, New York.
Q. 2. I show you a roll dated December 4, 1903, and ask you what it represents and how it came into existence?
A. This roll represents an improvisation made by me upon a piano at the Aeolian Company's factory.
Q. 3. Is it the only musical record of this improvisation made by you?
A. It is the only one that I know of; I don't think there is any other.

The roll is offered in evidence and marked "Complainants' Exhibit Friedberger Improvisation No. 1."

Q. 4. I show you another roll dated December 1, 1903, signed by you, and wish you to state whether this likewise is a record of an improvisation made by you at the Aeolian Company's factory?
A. Yes, sir.

The roll offered in evidence is marked "Complainants' Exhibit Friedberger Improvisation No. 2."

Complainants' counsel also offers in evidence the librarian's receipt of the musical composition represented by Friedberger
229 Improvisation No. 2, and the same is marked "Complainants' Exhibit, Copyright of Friedberger's Musical Composition."

The paper offered in evidence is objected to as incompetent, immaterial and irrelevant, as not being shown to have relation to any matter involved in this suit nor to any matter of evidence properly offered herein.

Q. 5. This Improvisation No. 2 has been published by the Aeolian Company, has it not?
A. I don't know that it has.
Q. 6. Tell us, if you please, the advantages to a composer in being able to record his musical thoughts in the manner in which you recorded them in the two instances mentioned?
A. With the aid of this recording machine, the musical ideas or improvisation preserves every quality and every characteristic in a way which no other method could possibly substitute for.

Q. 7. Have you ever heard these two improvisations of yours played after you had composed them?

A. Immediately after I had made these improvisations the rolls upon which they were cut by the recording machine was placed in the Pianola and from that the improvisation was played.

Q. 8. Would you have been able without the aid of these records to repeat or reproduce accurately your improvisation substantially as you made the same when you created them?

A. No, sir.

Q. 9. Referring now to the Improvisation No. 1 which I understand is the only record of this musical composition in existence, would you now be able to reproduce the same from memory?

A. No, sir.

Q. 10. So that I take it that one of the great advantages of instantaneously recording a musical composition in the way in which you recorded these two Improvisations, is that none of the composer's musical thoughts are able to escape, is that so?

230 A. Most decidedly.

Q. 11. By all other methods, the musical thoughts of a composer cannot be instantly recorded, with the result that some of them do escape him because the composer is unable to remember them?

A. I know of no other method to record perfectly in every detail and instantaneously one's musical thoughts, except by the Aeolian's Recording Machine.

The entire direct-examination of this witness is objected to as being not proper rebuttal and as being wholly irrelevant and immaterial.

Cross-examination of the witness without waiver of objections:

X Q. 12. How do you know these two rolls which you have testified about represent improvisations made by you?

A. My name is signed to them.

X Q. 13. If the end of the paper containing the signature were cut off, would you be able to identify them as representing your improvisations in any way?

A. I don't think so.

X Q. 14. I find a large number of changes made in both of these rolls; were the changes made before you signed them, or after?

A. I don't consider that there are any alterations made therein—only slips of the fingers which are liable to occur in improvisations or playing, or any musical activity, and which were not intentional on my part. I think they were corrected before I signed them.

X Q. 15. Did you discover the errors in the perforated roll and make the corrections or mark them?

A. After the record was made by the recording machine

231 the roll was placed in the Pianola and my improvisation was played from it; I then noticed that I had taken several wrong notes which were recorded accurately and faithfully just as I unintentionally played them by the recording instrument, and which

wrong notes were unintentional and due to nervousness. I requested that they be erased and corrected.

X Q. 16. I call your attention to a perforation on this roll Improvisation No. 2, about eighteen inches from the commencement of the perforation, and on the margin I have marked No. 1, identifying its position; do you know how many notes apart on the manual the perforation which is covered and the one nearest to it on the right stand? And whether or not it would be possible for the finger to slip from the key which caused the longer perforation which is not covered, onto the key which caused the short perforation which is not covered?

A. I have not the slightest idea how far apart they are.

X Q. 17. Look at the point in this roll about three feet from the commencement, opposite which I have placed the mark 2, where there is a perforation something over ⅜ of an inch long which is covered and an inch or more from the perforation nearest it; can you tell whether a finger could slip from any key which caused any perforation at this position on the paper, onto the key which caused this covered perforation?

A. The finger is liable to slip from any key to any other key, within one octave anyhow and possibly more; it depends largely upon the nature of the composition or improvisation. If the nature of the composition consist of jumps, the finger is liable to slip almost any place; in other compositions the field of slipping would be narrower.

X Q. 18. If the keys from which and onto which, respectively, the finger slips are not adjacent, that is, one next to the other, the
232 finger would have to leave one key in order to reach the other, and could not hold them both down at one time, could it?

A. That depends upon the compass in which the melody or piece is written.

X Q. 19. Please explain how, in any compass, one finger could hold down at the same time, two keys not adjacent—I mean on the piano, or organ?

A. I don't understand your question.

X Q. 20. I understand you to explain the cutting of perforations in these rolls which you consider mechanical errors and which are pasted up, by the statement that the finger of the player is liable to slip from one key to another, and then I understand you to say further, that in case there are jumps in the composition the finger may slip from one key to another any distance, at all events within one octave. Then I inquired whether in that case the key from which the finger slipped and the key onto which it slipped, if it were not the next key, would both be held down at the same time by the finger thus slipping; you answer that that depends upon the compass, etc., and as I do not see how the compass in which the melody is written can make the finger broad enough to reach over more than the breadth of a key so as to hold down any more than the one key next to the one intended to be held down, I ask you to explain how it can be done?

A. The two notes are not sustained; they are sounded each in succession.

X Q. 21. Then when the two notes show or are indicated by perforations on the sheet cut at the same time, the explanation of the error is not due to slipping of the finger, because if due to that cause they could not show as cut at the same time, is that correct?

A. The error is due most decidedly to slip of the finger; I can't account for it in any other way, because the roll contains a
233 note which I sounded unintentionally and which I would not want in the composition.

X Q. 22. Then you mean by the words "slip of the fingers" any unintentional or erroneous stroke?

A. I mean any erroneous stroke or slipping off the key.

X Q. 23. It would be possible in the same way as these rolls have been corrected, to make other changes which might not be the mere correction of errors, and in the same manner in which you detected and marked for correction these errors, you could have picked out a point at which you might have wished to make essential changes and marked them and have them carried out; is not this a fact?

A. I don't think that is so. The only alterations were that certain perforations in the paper which represented wrong notes were eradicated or pasted over so that the correct notes only remained. I don't see how it would be possible to change the perforations which represent what I played.

X Q. 24. Any number of perforations could be pasted up in the same way in which these were, could they not?

A. I think they could.

X Q. 25. And in the same way that you selected or discovered these erroneous perforations, you did, or at least could have selected others which were correct for one purpose, that is, for one particular musical phrase which you actually used, but which could be changed if you had so desired by pasting them up and having others cut in other positions in the width of the paper at the same point in its length, so as to change chords here and there, and you could have made similar changes at enough points to entirely change the musical effects of phrases here and there, could you not?

A. I cannot read the perforation or the form of notation
234 upon the roll; those mistakes which I discovered upon hearing the roll played I corrected from the sound I heard upon the piano and not from the perforation on the roll. The improvisation would, immediately after having been played by me and having been recorded, be played for me and the wrong notes I called to the attention of the gentleman who played the improvisation for me, and he made note of my corrections upon the perforated roll. After hearing the composition I did not desire to make any changes except to correct the wrong notes that I struck unintentionally.

X Q. 26. If you had desired to make other changes, if, for example, where the wrong note was struck the right one was omitted, you would have pointed out as you listened to it being played on the Pianola, the place at which you wanted such a change made, in the same way as you pointed out the places where you heard superfluous notes, could you?

The question is objected to. The witness has repeatedly stated that

the only thing done to the roll to his knowledge was to correct certain errors by covering up certain perforations unintentionally produced by him when improvising upon the recording device. As the witness does not appear to speak the English language as good as some others, it is deemed right to call his attention to the fact that the word "superfluous" used by examining counsel has an entirely different meaning from the word "erroneous," which was the witness' word.

By Mr. BURTON: This slur upon the witness' English is entirely uncalled for. He speaks as perfect English as the eminent counsel and has thus far shown as nice discrimination in respect to the meaning of the English words as any English court could ask for.

235 A. The corrections which I made concern wrong notes only, and such corrections were made by pasting over perforations in the roll. I don't believe, at least it is not to my knowledge possible, that any other changes in the perforations of the roll could be made other than the pasting over of certain ones. I don't know that the perforations could in any way be changed.

X Q. 27. I understand you to state that all the changes made in the roll were in the nature of eliminating perforations, and that there were no changes made by way of adding perforations; is that correct?

A. That is so.

X Q. 28. And if you had found at any point in the roll, as you listened to it played, that some note was missing from a chord, so far as you know, the deficiency could not have been supplied by a correcting perforation—that is, by adding a perforation in the roll to correct it?

A. I don't see how it could be possible for any note to be missing, and I furthermore know, that is, I believe at least, that every note as I improvised was recorded upon the roll by the recording machine.

X Q. 29. You mean that you don't believe it possible that you could in any instance have failed to strike any note that you intended to strike, so that the note which you meant to obtain could be missing, and the corresponding perforation be missing from the roll?

A. It is possible that I might miss a note that I intended to strike, and I believe that that note must be missing upon the roll.

X Q 30. Then, so far as you know, it would not have been possible to correct the roll in that respect by supplying the missing perforation?

A. That I don't know.

X Q. 31. If it is possible to add perforations to a roll after
236 it has been taken out of the machine in which it is automatically perforated, then if you wished to change the melody or harmony at any point, you could give directions as you listened to it being played on the automatic player, where to make those changes, and the person who knew how to select the holes to be pasted up when you pointed out, guided by your ear, where there were erroneous notes to be suppressed, would equally well know how to pick out the perforations to be pasted up, and the places for cut-

ting the substitute perforations, to make the change in the melody or harmony which you might indicate, would he not?

A. I don't believe that alterations of harmony or melody could be effected by the mere pasting up of holes. The mere pasting up of one or more holes might not substantially change the harmony. In a four-voiced chord one note might be left out, and it would thereby become three-voiced, and still might remain the same harmony. I do not think that the melody could be changed to answer my desire by the mere pasting up of holes.

X Q. 32. But the melody and harmony might both be changed by pasting up of some holes and cutting of others, could they not?

A. I don't think so. I don't think that the result ensuing from pasting up of some holes, and the possible cutting of others (I have no knowledge that other holes can be cut in place of the ones originally cut), would result in an intelligible, logical, musical thought.

X Q. 33. Practically you only know that these rolls represent your improvisation when they are put in an automatic player and you hear the result; isn't that a fact?

A. Yes.

Redirect examination of the witness:

R. D. Q. 34. In your answer to X Q. 13 you said that if
237 the end of the paper roll containing your signature were cut off, you do not think that you would be able to identify them as representing your improvisation in any way; later on, in your cross-examination, I understood you to testify that if the roll were put in the Pianola and the composition played, you could identify it irrespective of presence or absence of your signature. Am I right about this matter?

A. After the roll was cut, it was immediately played for me and I remembered it and recalled it as what I had just played; since then I had not heard the same and have forgotten it. I don't think I could recall it to-day.

R. D. Q. 35. But you did recognize it at the time it was played?

A. Yes. When it was played immediately after the roll was cut, I recognized it.

Deposition of witness closed.
Signature waived.
Recess.

GEORGE SWIFT, a witness called on behalf of complainants, testifies:

Q. 1. What is your name, age, residence, and occupation?

A. George Swift; age, 41; residence, Meriden, Conn.; occupation, the foreman of the department of the Aeolian Company for preparing master rolls.

Q. 2. I show you Complainant's Exhibit, Friedberger Improvisation No. 2, and would like you to state whether you made musical records from said exhibit without the aid of any musical instrument or score in the shape of staff notations?

A. I caused to be made a master sheet from this roll,
238 without aid of an instrument or musical notation, by purely measurement.

Complainants' counsel offers in evidence the roll about to be shown witness, and the same is marked "Complainants' Exhibit, Roll No. 62,609."

Q. 3. Please look at the roll just offered in evidence, and state whether that is one of the rolls made from the Friedberger Improvisation just referred to?

A. That is the roll that was cut from the master roll made from the improvisation.

Q. 4. Did you likewise translate into staff notation the Bartlett roll called "Complainants' Exhibit Bartlett Improvisation," and is Complainants' Exhibit Bartlett Improvisation in the form of sheet music a translation of the perforated roll record, to wit, this Complainants' Exhibit, Bartlett Improvisation?

A. This sheet music, at a glance, seems to correspond with the manuscript forwarded by me to the Aeolian Company, which manuscript was made from this improvisation.

The entire direct-examination of this witness is objected to as not competent rebuttal and as immaterial and irrelevant.

Cross-examination without waiver of objections:

X Q. 5. When did you first see the perforated roll Friedberger Improvisation No. 2?

A. Within six weeks past, rough guess.

X Q. 6. Under what circumstances did you first see it?

A. It was forwarded to me in Meriden by an official of the Aeolian Company from New York.

X Q. 7. When it first came under your notice did it contain the corrections which are now found consisting of paper pasted over some of the slots?

239 A. It did.

X Q. 8. Have you any knowledge as to where and by whom those corrections were made?

A. I have been informed that the corrections were made by Mr. Young, an official of the Aeolian Company.

X Q. 9. Did you make any corrections or changes or were any made by your direction after it came into your hands?

A. I believe not; I am sure not.

X Q. 10. Will you please explain in what respect the master sheet you made, as you say from the perforated sheet here, differed from this sheet itself?

A. The musical ideas are identical, the difference between the two through the imperfection of the artist who made the improvisation being rectified musically in the master roll.

X Q. 11. Please explain what was done by your direction to rectify the imperfections in the original sheet due to errors of the artist?

A. In numerous cases where the artist had intended that one note in a chord should have been held correspondingly as long as the notes in the same chord, and really made the note shorter, we have lengthened it to correspond with the rest.

X Q. 12. You made no other changes except those that would be covered by that description?

A. There were some notes not in the chord—not part of a chord—which were lengthened for like reason.

X Q. 13. What do you mean by like reason, since the first reason related to the completion of the chord, and in these other cases, there was no chord to be completed?

A. On account of the artist's imperfections when he improvised the roll.

X Q. 14. The reason then for the lengthening of the slots
240 which did not correspond to the notes forming part of a chord was that you judged their deficiency in length to be due to imperfections of the artist's execution; do I correctly understand you?

A. Most assuredly so.

X Q. 15. If, by any possibility, the artist had a different idea and left the notes as he did, for the purpose of some musical effect which he appreciated and desired, the changes that you made would be to that extent an alteration or mutilation of his composition; am I right?

A. In all cases the musician must be guided by certain rules governing this production. In this case there could have been no mutilation; the musical sequence demanded that these notes must be lengthened.

X Q. 16. And if someone less musically skilful than yourself, than the person to whom you intrusted this particular work, had undertaken it, changes which might have been made in just as good faith and with just as sincere intention to preserve the musical idea of the composer might have resulted in mutilating it, I suppose?

A. That would be a matter of opinion. There is so much latitude in the question that I cannot answer it.

X Q. 17. It would be a matter of opinion then whether the changes which you made or caused to be made, perfected or mutilated the composition, would it?

A. The changes which I made could not be mutilations, because a strict regard of musical form was adhered to.

X Q. 18. You have a number of persons under your direction who are competent to do this kind of work, have you not?

A. I have.

X Q. 19. How long did it take them to become competent?
241 A. The time varies according to the intelligence of the person and the style of work with which he is entrusted.

X Q. 20. Some persons could never become competent, I suppose?

A. I have had such cases.

X Q. 21. While you had them and were endeavoring to train them, did they sometimes spoil the work they were upon, by changes which were not called for and which amounted to mutilations?

A. There are more or less imperfections in every arranger's work, however competent, which is rectified by the inspector.

X Q. 22. Your opinion that the changes which were made in this particular instance under your directions, did not mutilate but improve the composition, was based upon your confidence in your own accuracy and correctness of your musical judgment, or the person who did the actual correcting?

A. These corrections were based on my knowledge of musical form.

X Q. 23. And they were, to the best of your knowledge, those that were required for the improvement of the composition over the form in which it actually stood on the sheet when it came to you?

A. The actual form and musical idea have not been changed a particle; only the deficiency of the artist has been made good.

X Q. 24. I see you have taken the word "form" in my last question, in a way that I did not intend. I will state the question differently. The corrections in this instance were, to the best of your musical knowledge, such as were required for the improvement of the composition according to the composer's intention as you interpreted it?

A. That is a fact.

X Q. 25. And if someone not so able to interpret that in-
242 tention had attempted the corrections, while in his opinion the changes he might have made would have been those necessary for proper improvement of the work, in your opinion they might have been mutilations possibly?

A. As a musician, he must conform to certain rules which could not produce mutilation.

X Q. 26. Did you make a master also from the Bartlett Improvisation?

A. Yes, sir.

X Q. 27. Was there necessary in that case a number of similar changes or corrections such as you have testified to in respect to Friedberger's Improvisation No. 2?

A. They are like cases.

X Q. 28. Which did you make first, the master or the staff notation, of the Bartlett Improvisation?

A. The master.

X Q. 29. How did you make the staff notation after you had the master made? Explain the method followed.

A. That is a factory sheet.

X Q. 30. Did you make the staff notation before the master was used for cutting a number of rolls such as the one put in evidence?

A. I am unable to state as to this fact, but the music cut from the master roll was not used as a guide or help in producing the staff notation from the master roll.

X Q. 31. Those who are possessed of this factory secret are under injunction to preserve the secret, yourself among the number?

A. The work is so divided in different departments that the information imparted by an individual would not seriously impair the work as a whole.

X Q. 32. You mean that no one person employed in the work knows enough of it to give away the secret as a whole?

A. With very few exceptions.

243 X Q. 33. You mean with exception of a very few persons who know it all?

A. I will say, with exception of a very few persons who are intimately connected with the business.

X Q. 34. And even of those few persons, I judge from a remark you made a moment ago off the record, that no one "knows it all." Is that a fact?

A. No individual knows it all.

X Q. 35. You are familiar with the construction of a recording machine, are you not?

A. To a certain extent, not as an expert mechanic.

X Q. 35. You are sufficiently familiar with the method, are you not, so that you could determine whether or not a certain perforation had been produced by a certain punch if you had a preceding perforation produced by that punch to compare it by?

A. I believe I could.

X Q. 36. I now show you a perforation marked "5" on the Bartlett Improvisation Exhibit, and ask you whether or not this perforation was made with the same punch, or in other words, the machine punch which made the slot which precedes it in the exhibit and follows it?

A. In this exhibit a wrong note was played by the author; this has been patched up and the note which the author intended to play appears to be in part to have been cut out by hand.

X Q. 37. As I understand you then, there is an additional perforation which was not made by the machine?

A. A part of this perforation in question may have been made by the artist, how much of it I am unable to determine.

X Q. 38. I hand you the Bartlett Improvisation and ask you to examine the following slots which I have marked 7, 8, 9,

244 and ask you whether or not they do show signs in your judgment of having been cut or trimmed by a knife or another instrument than the automatic punch?

A. The notes mentioned showing the feed mark show that they have been cut by the machine; my impression is in these notes that in numerous cases the recording machine does not cut clean; it consequently leaves numerous chips in the perforation. It has been my experience having received various rolls from the recording machine, that we have in numerous instances taken a knife and cut out the chips; sometimes a cutter will be so dull as to only leave an imprint of the note; this we fix by the use of a knife on music which has come from the recording machine.

X Q. 39. And with reference to these chips or indentations of

which you speak, if they were not all removed from a master made from the automatic recorder, that master would not be a perfect reproduction of the operator's ideas, would it. Understand me by this, the sheet produced by the automatic recorder?

A. Your question is ambiguous. There is a mix up about the master roll. The roll that comes from the recording machine is not the master roll.

X Q. 40. To make clear my question, take a sheet that came from an automatic recording machine showing a depression of a punch but which does not amount to a perforation; from your former testimony this should indicate that it should be removed so as to make a perforation. If this partial perforation was not removed, the sheet would be lacking this one note or partial note, as the case may be, of the musician's intention?

A. Certainly.

X Q. 41. I show you perforations numbered 10 and 11 of Bartlett's Improvisation, and ask you whether they represent the player's intention, for they clearly show, do they not, the perforations were intended to be longer?

245 A. In regard to the player's intention, it is immaterial whether the note was longer or even shorter, as the chord has the appearance of a spread staccato chord.

X Q. 42. With these portions of perforations left in a slot, would, or would not this perforation, if placed on a player, have the exact time value as it was originally played?

A. If any variation exist, it would be of such a small duration as to be practically unnoticed. In these chords exhibited, as there is no time value to a staccato note, the effect could not be noticed.

X Q. 43. Where this might be partly true, is it not a fact, however, that the note produced from such an obstructed perforation would not accurately represent the original intention as to time value?

A. The amount is so slight that there is no notation minute enough to represent a note of such short duration.

X Q. 44. I did not intend to refer to staff notation; the question being whether or not the sound duration would be identically the same?

A. There would be such a slight variation as to be practically the same.

— Q. 45. If this is true, why is it that in all perforated music sheets there are single perforations, 1½ double, increasing by a portion of a perforation at a time if this slight variation is unnecessary or unnoticeable?

A. I do not understand what the increasing of one, 1½ increasing means.

X Q. 46. You have testified that in the perforations 10 and 11, that the variation of half a perforation and a whole is so slight that it would be immaterial to the reproduction of the air. Why is it that it is common practice to make single perforations, perforation and a half, and increasing by a portion of a perforation, if the variation is not noticeable to the ear?

A. To my knowledge, we do not increase perforations by
246 half or by a fraction such as a half on our cutting machines.

X Q. 47. I show you perforations in the Friedberger Improvisation No. 2, which I will mark 12 and 13, and ask you whether the perforation marked 13 is not half the diameter of the punch, or approximately so, longer than perforation No. 12?

A. It is most certainly, and this is frequently seen on copies from the recording machine.

X Q. 48. It is also seen, is it not, in a commercial roll?

A. To a certain extent, yes.

X Q. 49. And is not the purpose, as a matter of fact, to change the time value of the note to be sounded?

A. Being on the last end of the note, and of such small duration, it is unnoticeable.

X Q. 50. Then, in your judgment, such fine musical distinctions as these recorded by recording machines are entirely unnecessary or useless, are they not; do I correctly understand you?

A. Those which are as fine as those quoted are.

X Q. 51. Are you familiar with the perforators of the recording machine on which these Exhibits Improvisations were made, to the extent as to whether or not the punchers all travel in the same direction and would consequently pierce the paper from the same side?

A. I am not sufficiently conversant with the recording machines as to know anything of it mechanically.

X Q. 52. Are you familiar with any perforating machine?

A. Fairly so, but not as a mechanic.

X Q. 53. Did you ever see a duplicator or power perforating machine that perforated the paper from two opposite directions?

247 A. I shall have to refuse to answer that question from a factory standpoint.

The answer is insisted upon unless the witness means to be understood that he does not know. The question does not ask for any disclosure of any inventions or constructions not patented or published, but asks for only a result.

It is submitted that this witness was not offered as possessing mechanical knowledge of duplicating or power operating machines, but was offered simply to identify certain exhibits as manufactured by him or under his direction. It follows, therefore, that the present line of inquiry is not open, but cross-examination under familiar rules.

Furthermore, if the witness is of opinion that by answering the question now put he would be in any way liable to disclose the trade secrets of his employer, he is not only at liberty but under obligation to refuse to do so until ordered to do so by the Court after the proper proceedings had.

The witness, therefore, is advised that if his refusal to answer the question is because he considers that by answering it he might divulge the business secrets of his employers or his own, he may decline to answer the question until ordered to do so by the Court.

A. I decline to answer, following the suggestion of the counsel,

on the ground of factory confidence; that is, that by answering I might divulge secrets of the factory.

X Q. 54. I hand you Friedberger Improvisation No. 2 and ask you whether you can tell from which side of the sheet it was perforated?

A. No, sir; I cannot.

Deposition of witness closed.
Signature waived.

248 FRANCIS L. YOUNG, a witness called on behalf of complainants, testified as follows:

Q. 1. What is your name, age, residence and occupation?

A. Francis L. Young; I am thirty-two years old; I live in Brooklyn, and am the manager of the music department of The Aeolian Company of New York.

Q. 2. Have you a musical education?

A. I have studied both here and abroad for the purpose of qualifying myself as a teacher and public performer of the pianoforte.

Q. 3. Does the Aeolian Company, with which you are connected, publish music rolls?

A. It does, in large quantities.

Q. 4. How does the public refer to the publications published by The Aeolian Company?

A. Either as music or music rolls.

Q. 5. About how many of these rolls has your concern published up to date?

A. In all over 15,000, representing, I should estimate, about 10,000 different musical compositions.

Q. 6. Did you ever hear these music rolls called "controllers"?

A. Never at any time. In fact, I never heard of the word until my attention was called to the use of this term by defendants. Of course, I understand that the defendants mean the music rolls published by them and by our company and which are used in the self-player manufactured by these companies.

Q. 7. Are these concerns engaged solely in the business of producing these perforated music rolls?

A. There are several firms who make a business of publishing these rolls, whose sole business consists of the publication of these music rolls. These concerns do not manufacture self-playing or musical instruments of any kind. I may mention the Perforated Music Roll Company as an example.

249 Q. 8. With what kind of musical records are you familiar?

A. With sheet music and music rolls.

Q. 9. These rolls have been called "controllers" by Mr. Hedgeland. Suppose a perforated roll was made in which the perforations were arranged without regard to the reproduction of any musical composition—placed in the paper at random so as to produce no melody or harmony—would such a roll operate one of these instruments?

A. It would.

Q. 10. Would it be possible to sell such a roll?

A. It would not.

Q. 11. But as far as any strictly mechanical functoin is concerned, it would operate or control the mechanism of the piano player equally as well as a roll which was the record of a musical composition?

A. It would.

Q. 12. Then it is obvious that in purchasing a perforated roll the buyer has no interest whatever in the mechanical function of his instrument?

A. He buys the perforated roll because he wishes to perform the musical composition of which it is the record. Were it not for the fact that these rolls are records of musical compositions they wouldn't be made and they couldn't be sold. Their value commercially depends upon the popularity of the musical composition of which they are the record.

Q. 13. How many music rolls has your company in its circulating library?

A. In our New York circulating library there are nearly 175,000 rolls. Similar libraries are also maintained in England, France and Germany. Thus thousands of people have opportunities of hearing these compositions by means of these libraries.

250 Q. 14. Can you estimate the number of performances on the piano by means of these music rolls in one year?

A. I have endeavored to obtain a conservative estimate and find that we have sold in all between five and ten million different rolls of music. By investigation we found that the lowest average of performances of each roll was twenty. At this rate there would have been performed on the piano by means of perforated music sheets no fewer than one hundred million compositions per year.

Q. 15. Have these music rolls been used by celebrated artists to play accompaniments?

A. Concerts and recitals have been given, both here and in Europe, many times, at which artists of the highest rank have performed or sung to the accompaniment played on these instruments by means of the perforated music rolls. I myself have heard accompanied by instruments using these rolls Madame Nordica, Edouard De Reszke and many other celebrated artists. All the catalogues of the publishers of these music rolls claim as one of the advantages this use to which these perforated music rolls may be put.

Q. 16. Can a musical composition be more perfectly rendered by means of these music rolls than by the average performer from sheet music, and, if so, in what respect?

A. By means of these rolls a performance may be had on the piano which in all of the essential points of musical expression would be infinitely superior to that of any performer, except possibly the great artists. The very large number of testimonials which have been given by artists, musicians and composers of the highest rank show the favor which these new musical instruments and this new musical style of notation has received. The fact also that some of the greatest artists living have indicated, by means of the metrostyle line

251 over their own signatures, their own interpretations of various works, would indicate their approval. I am satisfied that by no

other means is it possible to record the interpretations of these great artists, as nothing exists in any ordinary printed notation to indicate anything like interpretation. Merely to show a few of the persons who have indicated their interpertations, I offer the rolls of Paderewski, Moszkowski, Madame Chaminade and Bartlett.

Rolls offered in evidence and marked Complainants' Exhibit Metrostyle Perforated Roll of Paderewski, Mowskowski, Chaminade and Bartlett respectively.

Q. 17. I show you Complainants' Exhibit Friedberger Improvisation No. 2, and ask you whether the Aeolian Company has published the same?

A. Yes, it has. It is in our catalogues, and known as No. 62,609 (M), and I here produce one of these records.

Offered in evidence as "Complainants' Exhibit Friedberger Roll No. 2," of this date.

Q. 18. For years past musicians have made improvisations and compositions specially for your company, and you have records of these improvisations and musical compositions, have you not?

A. Oh, yes, a large number of them.

Q. 19. Is it absolutely necessary that these music rolls be perforated in the way they are commonly perforated to be playable?

A. No; I have here, for instance, a method invented by me showing not only perforations, but at the same time letters of the particular tone which such perforation represents, the perforation itself forming the letter of the tone.

Roll offered in evidence and marked "Complainants' Exhibit Young Roll No. 1."

252 Q. 20. I show you another roll, and wish you would explain it?

A. That is an ordinary perforated music roll taken from stock. I have caused lines to be drawn on the same, and likewise the clefs. Now, I can read it readily; but it must be read from right to left. If now I would place this roll with a light behind it on a piano, I can read it and play it on the piano as I would any other composition.

Offered in evidence and marked "Complainants' Exhibit Young Roll No. 2."

Q. 21. To what extent are you guided by the perforations in the music rolls when you are playing the pianola or a similar instrument?

A. It is well known that familiarity with an instrument like the pianola enables a person to recognize certain features as they unfold themselves to one on the roll. For instance, it is exceedingly easy to recognize a chord, a run or a trill; I can also tell on any roll of music whether a run be chromatic or an ordinary scale or an arpeggio at a glance; I can also recognize a trill or a chord. It is also possible in most instances to recognize the melody note, whether in the bass or in the treble. Assuming that the person who plays the piano with the pianola is more or less musical and familiar with the

operation of the levers, it is possible for him to accent these melody notes to some extent and to give due prominence to such melody notes. I, in nearly every instance when playing the piano with the pianola, recognize a chord when it is introduced at the end of a run for a climax; thus I immediately prepare to accent such a chord, and recognize from its appearance and position its relation to the run spoken of, and realize in order to properly bring out the effect which was obviously intended by the composer, it is necessary to ac-
253 cent this chord the same as I would do if I were playing the passage on the piano by hand, and were reading the composition from the printed sheet music. It is very easy to see when a passage either in octaves, chords or single notes is ascending or descending. I can tell at a glance whether a passage has been indicated in the printed sheet by the composer to be played legato, non-legato or staccato from its appearance in the music roll, assuming that the perforated sheet is a faithful transcription of the indications made by the composer in the printed sheet. I can in nearly every instance tell from the appearance of the perforations what kind of phrase marks were used by the composer in the sheet music, as the perforations are so cut and arranged as to bring out the phrasing as indicated by the composer. It is a comparatively simple matter to tell where the measure divisions occur. I think I can draw a line across the perforated music sheet to indicate where each measure ends and where the next begins—as a matter of fact, this is constantly done on the music sheets which are cut for the purpose of accompanying singers or instrumental artists. I have here a roll which has been marked in this way, and in order to do this work it is only necessary to compare the sheet music with the notes cut in the music roll. In many cases I can tell when syncopation occurs, and from the appearance of the perforations will know which note is to be brought out in order to have the proper effect of the syncopation. I can tell at a glance how to perform certain passages as to their time durations by their appearance on the roll. For instance, if a cord is to be played which on the sheet music should have the duration of a dotted eighth followed by a sixteenth, and next in turn followed by another chord, I know at once what the composer desires as much as if I were playing by hand, and in such a case I would hold the first
254 chord a little longer than its indicated length, and play the second chord a little faster. This figure occurs a great many times in classical music, and I believe I can detect it every time on the perforated music. I have two rolls here upon which no indications have been made as to time, accent, or in any way to guide one as to the proper performance, but I believe I can indicate most of the melody notes to show where syncopation occurs, and to illustrate, if you desire it, nearly all the points and features which I have suggested and described in the foregoing. These two pieces are classics and I have never seen the sheet music of either of them and have never played either by hand, and have only heard one of them so played, and that but once several years ago.

All of the above points are necessary to a proper rendition of the compositions, and, of course, I can detect them, regardless of the

name of the notes or the key. If a covering were placed over the unwinding roll, and I were not able to see the music sheet, it would not be possible for me to recognize any of the above features, and the effect musically would be as unpleasant as if I struck wrong notes.

Q. 22. Please produce catalogues of the different instruments manufactured by your company and also catalogues containing a list of all the music which you publish.

A. I do so.

Offered in evidence and marked "Complainants' Exhibits Aeolian Catalogues numbered 1 to 34 respectively.

Q. 23. Have you heard the testimony given by complainants' witness, Homer N. Bartlett, concerning Complainants' Exhibit Bartlett Manuscript Score and Complainants' Exhibit Bartlett Andante Graziosa Roll? If yes, please state the importance of per-
255 forated music rolls of similar characteristics in that it would be beyond the capacity of a single performer, or of even two performers, to render the same manually.

A. A composer in writing a composition for the piano for manual performers must keep in mind that the composition must lie within the range and within the possibilities of execution of two hands, unless he is writing a composition for four hands, in which case he must always consider the limitations of each performer. By the use of perforated music sheets the composer is enabled to give full vent to his musical ideas without being obliged to consider the limitations of the human fingers or the technical difficulties therefor. Thus is made possible the use of the pianoforte for music heretofore impossible. The importance to the musical art generally, as some of the greatest compositions of the greatest composers have been for the pianoforte, cannot be overestimated. We have already started a catalogue of compositions written especially for the instrument in this way, and intend to have compositions written especially by a large number of the greatest composers now living.

Q. 24. What have been your duties as manager of the music department of the Aeolian Company?

A. I have had charge of the selection of music to be arranged; I have also been in charge of all the music which has been marked for the metrostyle, and I am expected to pass upon the new productions of the company as to their musical features.

Q. 25. For how long have you been manager with these duties to perform?

A. For about a year and a half.

Q. 26. What, if any, previous connection had you with the Aeolian Company or experience with its automatic instruments including automatic organs, pianos and also the instruments called pianolas?

A. I was for a little over a year employed in the retail
256 selling department involving the selling of instruments and perforated sheet music and subsequently was manager of the retail department of the Orchestrelle Company in London, England, for over three years. This company is now a branch of the Aeolian

Company. During the said three years the business of the Orchestrelle Company was the same as that of the Aeolian Company in New York as to the instruments sold and as to the perforated sheet music.

Questions 3, 4, 5, 7, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 and 23 of the direct-examination of this witness and the answers thereto are objected to as not rebuttal and as immaterial and irrelevant.

Cross-examination without waiver of objection:

X Q. 27. Do you mean by your answer to Q. 20 to imply that you can take an ordinary perforated music roll of a piece with which you are not familiar and the roll itself not having been handled or examined by you before and read it and play it on the piano as you would read and play the staff notation of the same piece of music, assuming now that it is within the range of staff notation and of manual reproduction?

A. As I am naturally more familiar with the ordinary notation for the purposes of sight reading at the piano I do not suppose I could read the roll of which you speak so readily without practice as the printed notation. I believe, however, that I could play every note from a roll so marked.

X Q. 28. To what extent have you ever experimented or made the attempt to thus play from a roll of an unfamiliar or unknown piece of music without previous examination of it?

A. I have had in my possession but one roll marked in this way which I have tried to play on the piano; whether any other
257 rolls have been made this way or not, I am not prepared to say, but the one offered in the exhibit I have tried and found that with comparatively little difficulty I could read it.

X Q. 29. This one marked roll, then, I understand, is the extent to which you have made the attempt?

A. That is so.

X Q. 30. Your first step in that attempt was to mark the lines longitudinal and transverse which were to guide the eye of the person attempting to read it; am I correct?

A. As stated in my answer to Q. 20, I said I caused the roll to be made, and at the time the direction was given to make such a roll the idea was not new, as I understand the Aeolian Company, or one of its employees, had applied for a patent for such marking.

X Q. 31. But when you made your attempt to read it, it had already the lines upon it as now?

A. Yes, sir.

X Q. 32. How does the width of the perforated area of this roll compare with the ordinary commercial roll?

A. It does not vary at all. Some of the compositions which we have had arranged on the rolls have taken in a greater space across the sheet, but the perforations, spacing, the width of the roll, are the same as our regular commercial roll.

X Q. 33. The piece which is represented here simply happens to be one whose notes are all within a compass which would be represented

on common staff notation upon two five line staffs, with perhaps one leger line above and below?

A. It is true that this particular composition does come within a compass of about four octaves.

X Q. 34. Has this composition a title by which it is known in the trade, or copyrighted?

A. That I cannot answer, as I do not know what the composition is by name.

258 X Q. 35. The longitudinal lines on this paper are intended to correspond to the horizontal lines in the staff notation?

A. That is true.

X Q. 36. And the transverse lines correspond to or indicate the measure divisions?

A. That is true.

R. D. Q. 37. When you caused the Complainants' Exhibit Young Roll, No. 2, to be made, what guided you in selecting the particular musical composition contained thereon?

A. In selecting this roll to be marked I gave instructions to have a roll selected which should, if possible, come within the compass of four octaves, so that the exhibit itself would be plain.

R. D. Q. 38. Did you designate any particular musical composition which the roll was to embody?

A. I did not, nor do I know the name of the composition.

Deposition of witness closed.
Signature waived.

Leo J. Matty, a witness called on behalf of complainant, testifies:

Q. 1. What is your name, age, residence and occupation?

A. My name is Leo J. Matty; I am 25 years of age; I reside in the City of New York; I am a mechanical engineer and am at present studying law.

Q. 2. Where and when did you graduate?

A. I graduated last June at the Columbia University of the City of New York with the degree of mechanical engineer.

Q. 3. Have you any musical education?

A. I can hardly claim that I have. While I was at college I was a member of the Mandolin Club and I know how to play the
259 mandolin, but that is the only musical instrument.

Q. 4. I show you Complainant's Exhibit 5, a perforated music roll, entitled "Little Cotton Dolly," and ask you whether you are able to translate this into staff notation without the aid of any musical instrument or the staff notation for the same, or hints, directions, or assistance from others?

A. Yes, I am able to do this. In fact, I did it. No one asked me to do it. I became interested in the subject, hearing so much about it here in the office, and I made my own templet, and with the aid of the templet I am able to pick out any note in that perforated music roll.

Q. 5. Please explain in detail and with the aid of diagrams, how

you made your templet from this Complainant's Exhibit 5 without assistance of any kind?

A. In the first place, I took a T-square, which was made to move up along the side of the perforated music roll. Starting at the bottom I marked each perforation as the T-square moved upward. After the T-square had been moved up in this manner about a foot I obtained about twenty-two marks on the T-square, each mark denoting a different note. From this I observed the notes that were intended to be played. I then took this T-square away from the music roll and figured how many notes could possibly be played in a certain length of the T-square. I did this by noticing the marks denoting the notes nearest together and I found, knowing that there are thirteen notes in an octave, counting full notes and half notes, as between C of the lower and C of the upper, being an octave apart. Then, knowing the width of an octave, I drew a separate scale, making the necessary eight steps in an octave, as C, D, E, F, G, A, B, C. Now, I know that between E and F and B and C there are half tones in the key of C. Now, by applying this octave to my
260 T-square, I move it along until I find where it coincides with the marks on the T-square, and when I find this position I can mark the T-square with the letters designating the notes. Having found this much, I can apply the T-square, which can now be used as a templet, to the perforations on the roll and I can mark against each of these perforations the note corresponding to the perforations.

I have here a templet which I have made according to the method just described by me.

Complainant's counsel offers the templet in evidence and it is marked "Complainant's Exhibit, Templet of the 'Little Cotton Dolly' Roll."

Q. 6. Have you ever seen an Apollo self-player.

A. I have not, to my knowledge.

The entire direct-examination of this witness is objected to as not proper rebuttal at all.

Cross-examination without waiver of objections:

X Q. 7. Will you please produce the staff notation which you made, as you state in answer to Q. 4?

A. I didn't write the music on staff notation; I made a templet of it, by which this can be done.

X Q. 8. You do not mean to imply, then, as your answer would seem to imply, that you actually made a staff notation of "Little Cotton Dolly"?

A. No.

R. D. Q. 9. What tests did you make with your templet on the piece entitled "Little Cotton Dolly?"

A. After I had made the templet, as I have described, I placed this upon the perforated music roll and read the notes off as I moved the T-square, with the markings on it, up along the roll.

R. D. Q. 10. How do you know that the perforations which you

read by means of the templet were correct and represented the
261 notes in this musical composition entitled "Little Cotton Dolly"?

A. After I had made the templet, Mr. Gunz procured the sheet music, and while I read it off he compared it with the sheet music.

R. D. Q. 11. And what did this comparison show?

A. This comparison showed that I had made the templet correct, and that I could read the notes at random.

R. D. Q. 12. On the music roll?

A. Yes, sir.

R. X Q. 13. Does your templet, this exhibit here, afford you any means for ascertaining anything else except the pitch or the name of the notes.

A. No, that is all.

R. X Q. 14. And that is all you undertook to ascertain?

A. I didn't undertake to do any more than that.

Deposition of witness closed.

The signatures of the witnesses who testified at this session at this examination are waived.

Complainants rest.

262 Circuit Court of the United States, Southern District of New York.

In Equity. No. 8127.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

COMMONWEALTH OF MASSACHUSETTS, *Suffolk, ss:*

Banks M. Davidson, being duly sworn, deposes and says:

I have heretofore testified in this case. The piece entitled "Kentucky Babe Schottische" was published for the first time anywhere in the world on November 23, 1896.

(Signed) BANKS M. DAVIDSON.

Sworn to before me this 28th day of January, 1904.

(Signed) EDWARD C. BOURNE,
[NOTARIAL SEAL.] *Notary Public.*

263 Circuit Court of the United States, Southern District of New York.

In Equity. No. 8127.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

STATE OF PENNSYLVANIA, *County of Philadelphia, ss:*

Adam Geibel, being duly sworn, deposes and says: I have heretofore testified in this case and I am the author of the musical composition entitled "Kentucky Babe Schottische," and referred to in the record as Complainant's Exhibit No. 5. At the time I composed the music I was a citizen of the United States, to the best of my knowledge, information and belief. I base my information and belief on the following state of facts:

I was brought to this country by my father from Germany when I was a small child. My father became a naturalized citizen long before I became of age. I have voted at State and National elections upon the presumption that I was a citizen, and my vote has never been challenged.

(Signed) ADAM his X mark. GEIBEL.

Sworn to before me this 30th day of January, 1904.
(Signed) ROBERT OSBORNE, JR.,
[NOTARIAL SEAL.] *Notary Public.*

Commission expires January 2, 1905.

264 Circuit Court of the United States, Southern District of New York.

In Equity. No. 8127.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

It is hereby stipulated by defendant's counsel that the foregoing *ex parte* affidavits shall be admitted in evidence with the same effect as if the witnesses had testified orally and been offered for cross-examination.

CHARLES S. BURTON,
Defendant's Attorney.

265 Circuit Court of the United States, for the Southern District of New York.

In Equity. No. 8127.

WHITE-SMITH MUSIC PUBLISHING CO., Complainant,
vs.
APOLLO COMPANY, Defendant.

It is hereby stipulated by and between the counsel for the parties respectively that said cause shall not be set down for hearing on the merits any term or session of said Court earlier than October, 1904, and that upon the motion of either party it shall be set down at the first or any subsequent term after said October 1st.

It is further hereby stipulated that the defendant may introduce evidence in surrebuttal at any time prior to September 15, 1904, such surrebuttal, however, to be limited to the following topics, to wit:

1. Explanation of the patents introduced in evidence by the complainant in rebuttal, and evidence as to purpose and limitations in the use and utility of the matters and things shown in said patents.

2. Evidence as to perforated rolls filed for copyright in the office of Librarian of Congress—when, by whom and how many—and any proceedings in the office of the Librarian of Congress relative thereto.

3. Evidence as to the purpose, use and utility of the so-called music-recording machines and the so-called musical records produced thereby.

DICKERSON, BROWN, RAEGENER & BINNEY,
Solicitors for Complainant.
CHAS. S. BURTON,
Of Counsel for Defendant.

266 COMPLAINANT'S EXHIBIT No. 1

(8126.)

(No. 7164.)

COMMONWEALTH OF MASSACHUSETTS:

Be it known that, whereas, Daniel L. White, Walter M. Bacon, James J. Maguire, Banks M. Davison and Lawrence P. Maguire have associated themselves with the intention of forming a corporation, under the name of White Smith Music Publishing Company, for the purpose of printing, binding, publishing and selling musical publications and music and other books, and general job printing, and buying and selling musical instruments and musical works of all kinds, and manufacturing and selling all machinery, tools

and articles used in the music business with a capital of One Hundred Thousand dollars, and have complied with the provisions of the Statutes of this Commonwealth in such case made and provided as appears from the certificate of the President, Treasurer and Directors of said corporation, duly approved by the Commissioner of Corporations, and recorded in this office:

Now, therefore, I, William M. Olin, Secretary of the Commonwealth of Massachusetts, do hereby certify that said Daniel L. White, Walter M. Bacon, James J. Maguire, Banks M. Davison and Lawrence P. Maguire, their associates and successors, are legally organized and established as and are hereby made an existing corporation under the name of White Smith Music Publishing Company, with the powers, rights and privileges, and subject to the limitations, duties and restrictions, which by law appertain thereto.

Witness my official signature hereunto subscribed, and the
267 seal of the Commonwealth of Massachusetts hereunto affixed, this sixteenth day of April in the year of our Lord one thousand eight hundred and ninety-seven.

[L. S.] (Signed) WM. M. OLIN,
Secretary of the Commonwealth.

COMMONWEALTH OF MASSACHUSETTS:

OFFICE OF THE SECRETARY,
BOSTON, *March* 26, 1898.

I hereby certify that the foregoing is a true copy of the record of the Certificate of Incorporation of White Smith Music Publishing Company, organized under the provisions of chapter one hundred and six, section twenty-one of the Public Statutes.

Witness the seal of the Commonwealth.

[SEAL.] WM. M. OLIN,
Secretary of the Commonwealth.

268 COMPLAINANT'S EXHIBIT NO. 2.

(8126.)

Know all men by these presents, that I, Daniel L. White, of Boston in the County of Suffolk and Commonwealth of Massachusetts, for value received, hereby sell, assign and convey to the White-Smith Music Publishing Company, a corporation duly established under the laws of Massachusetts, all and singular, the machinery, tools and fixtures belonging to me and heretofore used by me under the firm of the White-Smith Music Publishing Company, and situated in said Boston, and also all the merchandise on hand belonging to me under said firm and situated in Boston, Chicago and New York City, however the same may be described, and also all the music plates both engraved and stereotyped, and all the titles and copyrights of music and music publications now owned by me under said firm, and also all the store fixtures and furniture owned by me and situated in Boston, Chicago and New York City.

To have and to hold the same to the said corporation, its successors and assigns.

In witness whereof, I have hereto set my hand and seal this Seventeenth day of April, in the year Eighteen hundred and ninety-seven.

(Signed) DANIEL L. WHITE.

269 COMPLAINANT'S EXHIBIT No. 3.

(8126.)

Agreement

made this 18th day of June, A. D. 1897, between White-Smith Music Publishing Company, of Boston Massachusetts, hereinafter called the Company, and Adam Geibel and Richard Henry Buck, of Philadelphia, Pa., hereinafter called the composers, to wit.:

Whereas: The composers have placed in the hands of the Company the unpublished manuscript of "Little Cotton Dolly" Plantation Song,

It is hereby agreed between the parties aforesaid that after publication of said manuscript by the Company, and during the term of copyright of same, it is to pay to the composers or their legal representatives, a Royalty of three cents each for each and every copy sold in the United States by the Company, after deducting 150 copies from the first edition for the purpose of advertising or otherwise introducing the same. It is further agreed that should the Company receive any royalties by reason of the publication of said manuscript by others in any foreign country, then — per cent. of the amount so received is to be paid to the composer.

The composer hereby grant- to the Company and its legal representatives, successors and assigns, forever, the full and exclusive right of copyrighting, publishing and selling said manuscript and copies thereof in the United States and all foreign countries, and covenant that they are the composers and sole owners thereof, that the same is free from all encumbrances and that they have good right to grant to the Company the privileges herein contained.

270 The composers hereby further bind themselves and their legal representatives to execute all papers and to do all acts and things necessary to obtain any and all copyrights and renewals thereof and to vest the same in the Company, its successors, legal representatives and assigns.

In witness whereof, the parties to these presents have hereunto set their hands the day and year above written.

WHITE-SMITH MUSIC PUBLISHING CO.
D. L. WHITE, *Pres't.*
RICHARD HENRY BUCK.
His
ADAM GEIBEL. X
Mark.

Witness:
FLORENCE W. WILLIAMS.

271 COMPLAINANT'S EXHIBIT No. 4.

(8126.)

No Protest.

This draft must be presented to the Bank within three months after date.

$1.00 BOSTON, MASS., *May* 15, 1897.

(C May 25.)

Pay to the Order of The Librarian of Congress,

One..... ——— Dollars,
100

in payment of fees for recording the following titles:

"Little Cotton Dolly" Plantation Lullaby, A. Geibel.

"Coon Superstition" Song, C. E. Trevathan.

WHITE-SMITH MUSIC PUBLISHING CO.
D. L. WHITE, *Pres't.*

No. 1744.

To The Boylston Nat'l Bank, Boston, Mass.

(Endorsed:)

Pay to the order of
The National Bank of the Republic.

A. R. SPOFFORD,
Librarian of Congress.

Pay to the Third National Bank, New York City, or order.

272 The National Bank of the Republic, Washington, D. C.,
Charles S. Bradley, Cashier.

Pay to the order of Nat'l Bank of Commerce, Boston, Mass.
Third National Bank, N. Y., H. Chaplin, Jr., Cashier.

Pay only through
Clearing House to Nat'l Bank of Commerce, Boston, G. W. Harris, Cashier.

273 COMPLAINANT'S EXHIBIT No. 6.

(8126.)

Copyright Mailing Receipt.

No. 7411.

(Original.)

REVISED STATUTES, SECT. 4956 (Amended March 3, 1891). No person shall be entitled to a copyright unless he shall, on or before the day of publication in this or any foreign country, deliver at the office of the Librarian of Congress, or deposit in the mail within the

United States, addressed to the Librarian of Congress, at Washington, District of Columbia, a printed copy of the title of the book, map, chart, dramatic or musical composition, engraving, cut, print, photograph, or chromo, or a description of the painting, drawing, statue, statuary, or a model or design for a work of the fine arts for which he desires a copyright, nor unless he shall also, not later than the day of the publication thereof in this or any foreign country, deliver at the office of the Librarian of Congress, at Washington, District of Columbia, or deposit in the mail within the United States, addressed to the Librarian of Congress, at Washington, District of Columbia, two copies of such copyright book, map, chart, dramatic or musical composition, engraving, chromo, cut, print, or photograph, or in case of a painting, drawing, statue, statuary, model or design for a work of the fine arts, a photograph of same.

REVISED STATUTES, SECT. 4961. The Postmaster to whom such copyright book, title, or other article is delivered, shall, if requested, give a receipt therefor; and when so delivered he shall mail it to its destination.

Post Office, BOSTON, MASS., *May* 15, 1897.

274 I have received this day for despatch, from White-Smith M. P. Co. a Package addressed to the

Librarian of Congress, Washington, D. C. containing Copyright Matter, as follows:

One printed title and two complete printed copies each of

"Little Cotton Dolly" Plantation Lullaby, By Adam Geibel.

"Coon Superstition" Plantation Song. By Chas. E. Trevathan.

J. T. BURNETT,
Act'g Postmaster,
By E. H.

275 COMPLAINANT'S EXHIBIT No. 7.

(8126.)

Librarian of Congress,
Copyright Office,
United States of America.

LIBRARY OF CONGRESS,
WASHINGTON, ——, —, 189–.

Library of Congress,
Copyright
May 17, 1897.
Washington, D. C.

White-Smith Music Pub. Co., Boston, Mass.:

The undersigned hereby acknowledges the receipt of two copies of "Little Cotton Dolly" (Plantation Melody), Words by Richard Henry Buck, music by Adam Geibel. "Coon Superstition" Plantation Song. Words and music by Chas. E. Trevathan,

transmitted by you to this Library, in conformity with the laws of the United States respecting Copyrights.

Very respectfully,

A. R. SPOFFORD,
Librarian of Congress.

C.

(Received at Office May 19 189- White-Smith Mus. Pub. Co.)

276 COMPLAINANT'S EXHIBIT No. 8.

(8126.)

No. 30193. C2.

A3.

Library of Congress, to wit:

Be it remembered,

That on the seventeenth day of May, 1897, White-Smith Music Pub. Co., of Boston, Mass., has deposited in this Office the title of a Musical Composition the title or description of which is in the following words, to wit:

Little Cotton Dolly (Plantation Lullaby). Words by Richard Henry Buck. Music by Adam Geibel.

White-Smith Music Pub. Co., Boston,

the right whereof it claims as proprietor in conformity with the laws of the United States respecting Copyrights.

A. R. SPOFFORD,
Librarian of Congress.

I hereby certify that the foregoing is a true copy of the original record of copyright. In witness whereof, the seal of the Librarian of Congress has been hereto affixed this fourteenth day of May, 1902.

HERBERT PUTNAM,
Librarian of Congress.
By THORWALD SOLBERG,
Register of Copyrights.

Office of the Register of Copyrights, Washington, D. C.

[SEAL.]

Written A. J.
Revised H. de K. W.
Mailed W. J. P.

277 COMPLAINANT'S EXHIBIT No. 9.

Cotton Dolly.

	Song.	Schot.	M. G.	M. P.	2 Banjo.
March 25, 1898.....	2060				
October 19, 1898.....	703	221	174	194	178
May 8, 1899.....	712	27	42	0	56
November 20, 1899.....	1088	8	5	6	8
May 21, 1900.....	856	0	0	2	0
November 25, 1900.....	368	21	6	1	10
May 18, 1901.....	331	11	21	5	5
December 15, 1901.....	317	9	2	1	4
June 4, 1902.....	278	3	3	0	3
	6713	300	253	209	264
	300				
	253				
	209				
	264				
	7739				

278 COMPLAINANT'S EXHIBIT No. 10.

Number of Copies Printed of "Little Cotton Dolly."

Date.	Male.	Mixed.	Female.
Nov. 13, 1897.....	.....	1000	
Nov. 19, "	500	.....	500
Dec. 15, "	300		
Feb. 1, 1898.....	200		
Mar. 8, "	.....	.....	200
May 10, "	300	.....	300
Oct. 7, "	200		
Nov. 9, "	400	.....	500
Feb. 11, 1899.....	.....	500	
Mar. 14, "	400		
May 8, "	.....	200	
May 16 "	.....	.....	400
June 14, "	200		
Oct. 2, ...	300	300	
Nov. 1, ...	400		
Nov. 9, "	.....	.....	300
Dec. 20, "	.....	250	
Feb. 10, 1900.....	.....	400	500
Apr. 21, "	300		
June 19, "	250		
Nov. 1, "	.....	.....	300

Date.	Male.	Mixed.	Female.
Nov. 13, 1900	.....	300	
Dec. 10, "	300		
Dec. 26, "	.....	.....	300
Feb. 12, 1901	400		
Mar. 12, "	.....	300	300
May 1, "	.....	.....	300
Oct. 9, "	300		
Feb. 19, 1902	.....	500	300
Mar. 1, "	300		
July 1, "	300	.....	500
	5350	3750	4700
			3750
			5350
Total			13800

279 DEFENDANTS' EXHIBIT No. 11.

Defendants' Catalogue.

(Not Printed.)

DEFENDANTS' EXHIBIT No. 12.

Music Roll.

COMPLAINANT'S EXHIBIT No. 13.

(8126.)

Theodore Pfafflin, Pres't & Gen'l M'g'r. G. F. Abendschein, Sec'y & Treas.
Chas. H. Wagner, Vice-Pres't.

Statement.

NEW YORK, 5/16, 1902.

M. C. H. Shaw to The Apollo Co., Dr.

(Vignette.)

Roll #4559 ..... 1.80
" #2519 ..... 1.20
$3.00

Paid May 16, 1904.
THE APOLLO CO.,

Per A. B. S.
May 16, 1902.

C. H. S.

280 COMPLAINANT'S EXHIBIT.

Extract from "Newark Call," Oct. 5.

School Children and Good Music.

Principal Schulte Procures a Fine Instrument for Morton Street School—Pupils May Now Become Familiar With Work of the Greatest Composers.

Morton street school has taken the initiative in what may be termed a new educational movement in the public schools. For the first time, so far as can be learned, in the history of the public schools of New Jersey an effort is to be made to familiarize the children with the music of the best composers by giving them the music itself in the school. Morton street school now has a self-playing organ of the sort known as the *Aeolian Grand*, and the pupils and teachers are well-nigh transported over their great good fortune.

For over a year Principal Otto H. Schulte has been striving toward the end now reached, the purchase of an aeolian for his school. He has owned one himself for some time and long ago came to the conclusion that nothing within the reach of a school would teach the children what they should know about music, would instil in the little people a taste for really good music, as one of these instruments. He has talked to his teachers about it, and to the children themselves. He has discussed the matter with graduates of the school and with others, and more than once his views on the subject have been set forth in the columns of the *Sunday Call*. No one has advanced the slightest objection to his plan; everyone has
281 commended it. Not a few have seen in the idea the beginning of a new epoch in the musical education of the young, and have watched Principal Schulte's efforts with interest.

But musical instruments of this sort cost a deal of money. Last year something like $250 was raised for the Aeolian fund. This was not half enough, however, and until a few days ago it seemed as if Morton street school still had long to wait before an aeolian might be had. Last Monday morning, however, the principal, in making a short talk to the grammar grade pupils in the assembly room, spoke again of the value of such an instrument, telling them how by its means the real musical creation was reproduced, very much as a fine photograph reproduces painted masterpieces. He closed by saying distinctly and with an evident wish that his words should be listened to closely; that he hoped that before the end of the present school year, before next June, the school would have an aeolian. That was all, but about 6 o'clock that evening the long-wished for instrument arrived. It was taken to the assembly room on the top floor of the big school, and when the principal returned to open the evening school his teachers met him with exclamations of delight. The instrument had come! He had told them nothing about it, so its coming was a complete surprise. There was no time that evening to try the instrument, but the next morning the principal

gave a short recital to the grammar grades and the teachers of the classes in those grades. The effect was most gratifying. The teachers were manifestly charmed and the children—well, they listened with wide-open eyes and mouth; the stillness was eloquent. Since then pupils and teachers have flocked about the instrument before and after school, and if ever a public school possessed a musical atmosphere Morton street has it now.

282 Last Saturday morning Principal Schulte had no more idea of buying an aeolian than any of his pupils. He went to New York about noon to secure his season tickets for the opera. On his way up town he stopped in at the offices of the dealers. He had been there many times before and was known there as being in search of the proper kind of instrument for his purpose at a reasonable price. One of the officers of the concern met him as he entered, saying he believed at last he had the instrument Mr. Schulte had so long been looking for and at a great bargain. They went to the hall upstairs where the instruments are shown. This particular aeolian is of the next to the best grade of instrument of the concern makers. Ordinarily it is sold for $750, but the terms offered Mr. Schulte were less. What was wanted was an instrument that would stand the atmospheric changes of a public school, a school that is warm during school hours and often very cold during the night. It must too, be an instrument that would possess volume enough to fill the entire room. This aeolian filled the bill. Mr. Schulte has played on many instruments; has, in fact, made a careful study of them for over a year. He played on this one for an hour or so, testing it carefully, and at last decided that it was the best for the school, all things considered, that he had tried. When he came to talk terms the officer of the concern was quite able to meet him, and in a very short time was arranged that the aeolian should be sent last Monday.

Morton street school has for a year had a public library sub-station, so that everything that can be done is being done to bring the children of the district in touch with the world's best literature. With an aeolian it is now felt the same may be done with reference to the world's best music. The children in that neighborhood are

283 largely the children of Poles, Russians, Hungarians, etc., people that have a deep-rooted fondness for music. It was plainly shown all last week. On Thursday and Friday, these being Jewish holidays, when this school has scarcely a half dozen pupils in a class, Principal Schulte took time to instruct his fifty or so teachers in caring for and playing upon the aeolian. He took them in groups of a dozen or so at a time. Many of them will soon be able to play it before their classes or before a room full. In the week just closed impromptu recitals have been given by Mr. Schulte to all the different departments: Grammar, primary, kindergarten, evening school and the annex. There has been but one verdict, that of delighted approval.

In order that the reader may more fully appreciate what the coming of such an innovation to a public school means a full list of the selections given at the school since the instrument arrived is printed herewith:

Lucia di Lammermoor—Potporri.....Donizetti
Carmen—Act IV., march and chorus.....Bizet
Bluebeard—Fantasie.....Offenbach
Symphony in C (Jupiter)—Allegro Vivace.....Mozart
Stradella Overture.....Flotow
Stars and Stripes Forever, march.....Sousa
Stille Nacht, Heilage Nacht.....Popp
Fackeltanz, No. 1.....Meyerbeer
A Mighty Fortress Is Our God.....Martin Luther's Hymn
Das Rheingold—Storm, Rainbow Bridge and Lament of Rhine Maidens.....Wagner.
Le Caid—Overture.....A. Thomas
Symphony No. 4—Clock Movement.....Haydn
Jesus, Lover of My Soul.....
O Tannenbaum—O Tannenbaum—Fantasie.....Lange
Rock of Ages.....
Don Cæsar de Bazan—Sevillana.....Massenet
284 Largo.....Handel
Mercy.....Gottschalk Hymn
Tannhauser—Act III., Scene 1—Elizabeth's Prayer.....Wagner
Mireille, Overture.....Gounod
Sun of My Soul.....
Echoes from the Metropolitan Opera House, comprising selections from The Prophet, Aida, Cavalleria Rusticana, Boabdil, Tannhauser, Nibelungen Ring, Pagliacci and William Tell.....
I Love to Tell the Story.....
Tannhauser—Pilgrim's Chorus.....Wagner
Nearer, My God to Thee.....
Selections from Boccaccio.....Franz von Suppe
Stabat Mater—Inflammatus.....Rossini
Schoener Mai Waltz.....Strauss
Heimkehr aus der Fremde—Overture.....Mendelssohn
The Singing Girl March.....Victor Herbert
Fete Champetre.....Tito Mattei
Fiorella Waltz.....Gustave Kerker
Polacca, Op. 72.....Weber
Barber of Seville Overture.....Rossini
Don Pasquale Overture.....Donizetti
Tannhauser Overture.....Wagner
William Tell Overture.....Rossini
Die Weihe des Hauses.....Beethoven
Quartet No. 4, Allegro Vivaco Assai, Menuetto.....Mozart
Die Meistersinger—Walther's Prize Song.....Wagner
O Salutaris.....Rossini
Parsifal Vorspiel.....Wagner

The teachers are, of course, watching the effect of the music upon their pupils. Two or three said that some of the children most interested were their "bad" boys. It honestly seemed as if music "hath charms to soothe the savage breast." This innovation
285 will have an influence upon school life not alone within the boundaries of the Morton street school district. Other prin-

cipals have been waiting to see what Mr. Schulte would accomplish in this direction. These and other educators will now have opportunity to hear the instrument and to note its effect upon the children, and in all probability in a year or so this will be but one of similar instruments in the city's schools. A year ago many, while sympathizing with Mr. Schulte in his desire to procure such a splendid educational force for his school, feared he would have a long, hard struggle before he accomplished it. He has been the pioneer; that many will follow there is comparatively little doubt.

286 COMPLAINANT'S EXHIBIT.

"Part of Pages 100, 101, & 651 of 'Drone on Copyright,' Commencemencing with '5 and 6 Vict. C., 45.'"

Copyright is the exclusive right of the owner to multiply and to dispose of copies of an intellectual production.'

I. The 5 and 6 Vict. c. 45, s. 2, defines copyright "to mean the sole and exclusive liberty of printing or otherwise multiplying copies of any subject to which the word is herein applied." Copyright in a book, as secured by the American statute, is "the sole liberty of printing, reprinting, publishing, * * * and vending the same." U. S. Rev. Sts., s. 4952.

5 & 6 Vict. c. 45.

An Act to Amend the Law of Copyright.

[8 Rev. Stat. 1152.] [1st July, 1842.]

Whereas, it is expedient to amend the law relating to copyright, and to afford greater encouragement to the production of literary works of lasting benefit to the world. * * *

II. And be it enacted, that in the construction of this Act the word "book" shall be construed to mean and include every volume, part or division of a volume, pamphlet, sheet of letter-press, sheet of music, map, chart or plan separately published; * * *

287 COMPLAINANT'S EXHIBIT COPYRIGHT OF BARTLETT'S IMPROVISATION, JANUARY 22, 1904. J. A. S., Ex'r.

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291 COMPLAINANT'S EXHIBIT COPYRIGHT OF FRIEDBERGER *vs.* MUSICAL COMPOSITION, JANUARY 22, 1904. J. A. S., EX'R.

Class C. XXc. No. 60650. C[3].

Library of Congress, to wit:

Be it remembered, that on the twelfth day of December, 1903, The Æolian Company, of New York, N. Y., hath deposited in this Office the title of a Musical Composition, the title of which is in the following words, to wit:

Piano 62609 (M) Improvisation in C sharp minor. Jaques Friedberger. Pianola Arrangement, the right whereof it claims as proprietor in conformity with the laws of the United States respecting Copyrights.

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Copyright Office, United States of America.

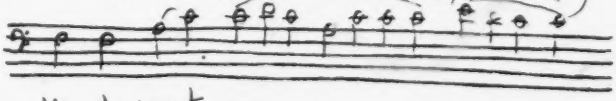
Written—H. H.
Revised—J. W. C.
Entered—M. C. T.
Mailed—E. S. E.

(Neumatic Notation
7th Century)

Vídérunt om nef

(Gregorian Notation
16th Century to the present)

(Staff Notation, modern)



(Tonic Sol Fa Notation, modern)

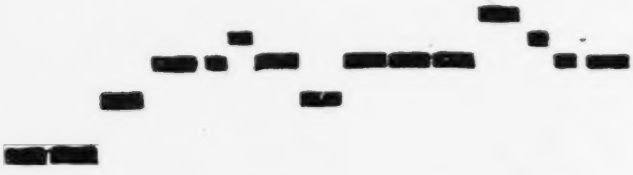
Key F

| d · : d | m : s | s . l : s | m : s | s : s | t : l . s | s : |

Vi - de - runt om - - - - - - - - - nes - - -

(Engelke Notation, modern)

(Approximate Aeolian Notation
reduced in size.
Blots in place of holes)

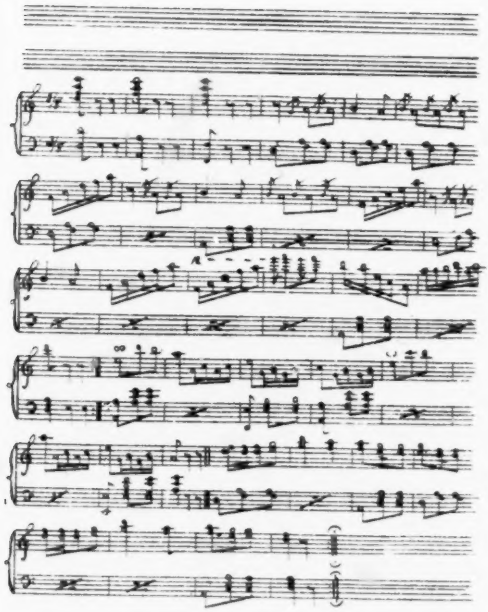


Vi-de-runt om - - - - - - - - - nes - - -

Sheet 1 - 11 Sheets

E. Von Heeringen

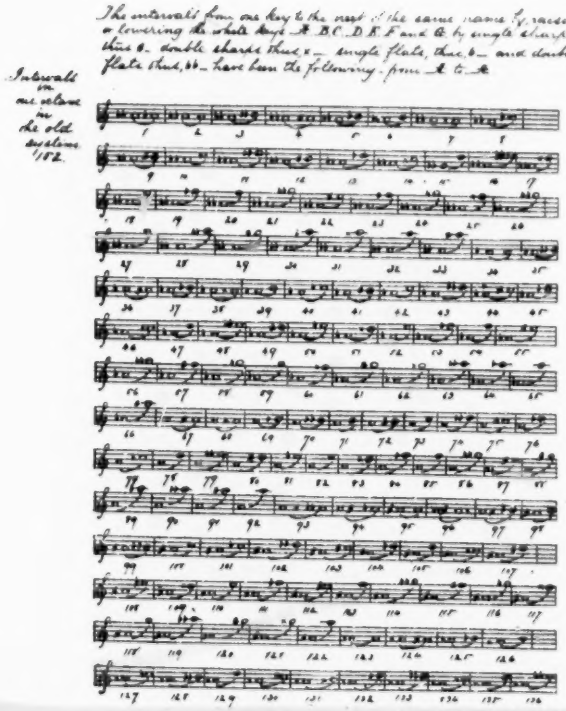
Musical Notation

No. 6528. Patented June 12, 1849.

Sheet 2 - 11 Sheets

E. Von Heeringen,

Musical Notation,

No. 6528. Patented June 12, 1849.


The intervals from one key to the next of the same name by raising or lowering the white keys A. B. C. D. E. F. and G. by single sharps, thus #. double sharps thus x — single flats, thus b — and double flats thus bb — have been the following - from A to A
Intervals in use before the old system 1842.

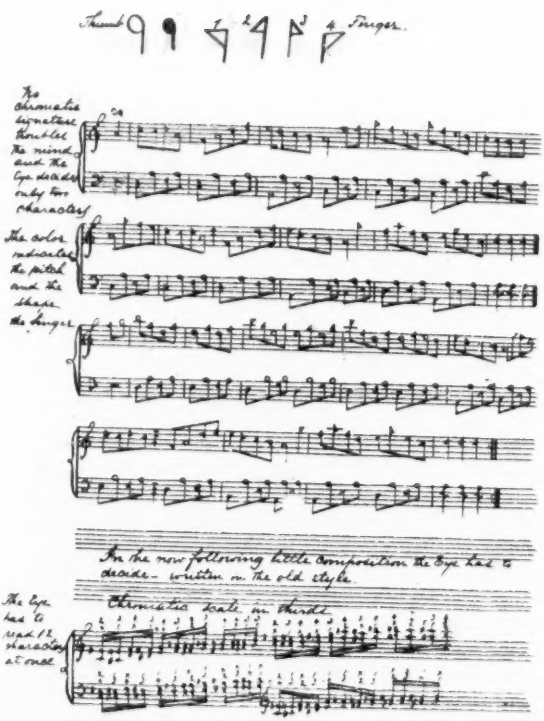
Nos. 110 & 111.
W. S. M. P. Co. v. A. Co.

Sheet 3 - 11 Sheets

E. Von Heeringen,

Musical Notation,

No. 6,528. Patented June 12, 1849.

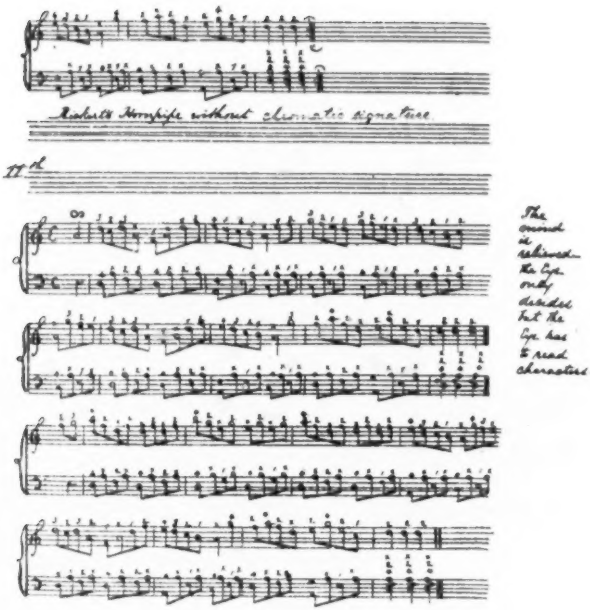

Thumb 1 2 3 4 Finger
The chromatic signature should be mind and the type should only two characters
The color indicates the pitch and the shape the finger
In the new following little composition the type had to decide - written in the old style.
Chromatic scale on chords
The type had to read 12 characters at once
49 2 characters

Sheet 4 of 11 Sheets

E. Von Heeringen,

Musical Notation,

No. 6,528. Patented June 12, 1849.

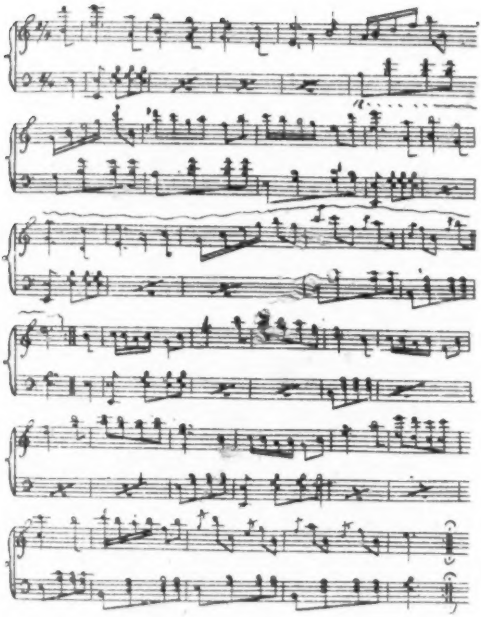


Nos. 110 & 111.
W. S. M. P. Co. v. A. Co

Sheet 5 11 Sheets.

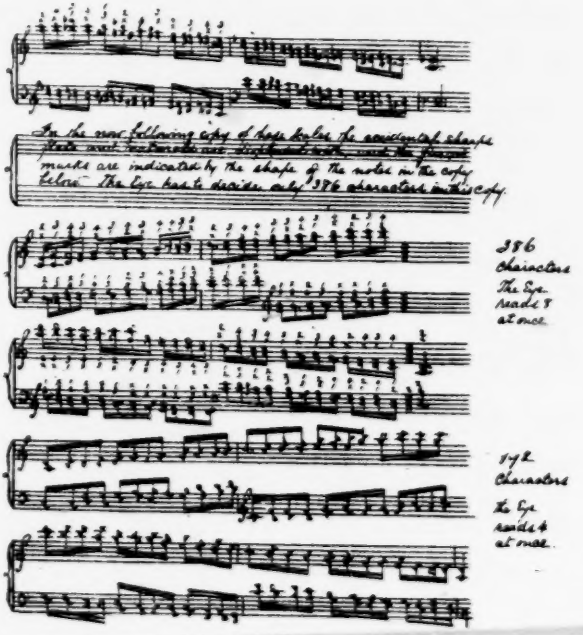
E. Von Heeringen,

Musical Notation,

No. 6528. *Patented June 12, 1849.*

Sheet 6 11 Sheets

E. Von Heeringen.

Musical Notation.

No. 6,528. Patented June 12, 1849.

In the new following copy of these bodies the combination of staves and notes and single characters which the figured marks are indicated by the shapes of the notes in the copy below. The Eye has to decide only 386 characters in this copy
386 Characters The Eye reads at once
192 Characters The Eye reads at once

Nos. 110 & 111.
W. S. M. P. Co. v. A. Co.

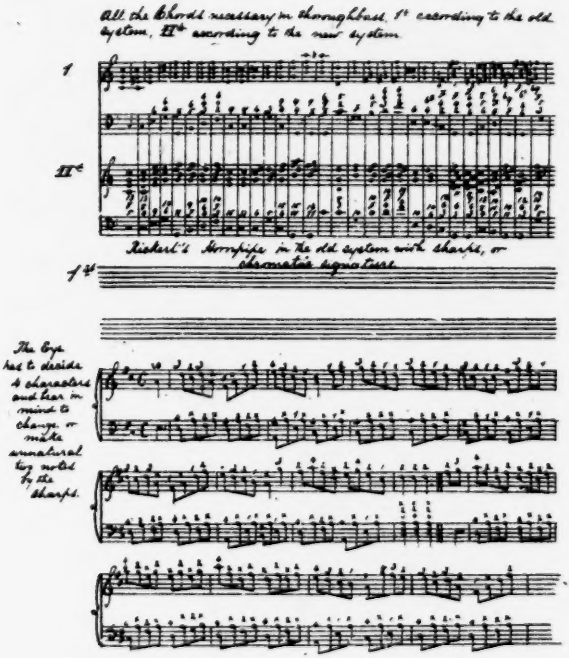
300

Sheet 7-11 Sheets.

E. Von Heeringen,

Musical Notation,

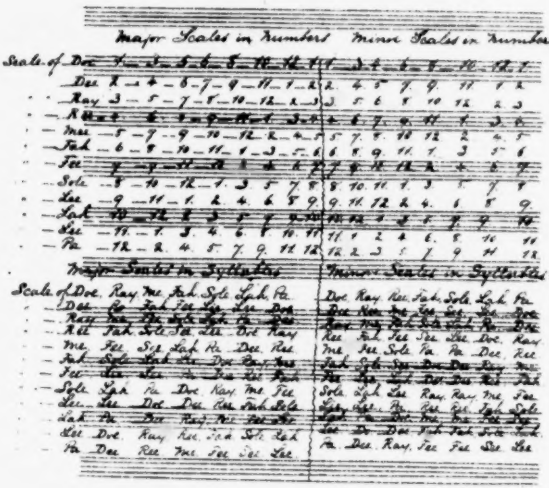
No. 6528. Patented June 12, 1849.


All the Chords necessary in thorough bass, I^st according to the old system, III^d according to the new system
I
III^d
Richard's Hornpipe in the old system with sharps, or chromatic signatures
of 4
The Eye has to divide 4 characters and bear in mind to change or make unnatural by what is left by the sharps.

Sheet 8-11 Sheets.

E. Von Heeringen,

Musical Notation,

No 6528. Patented June 12, 1849.

Scales by numbers the easiest for the young pupil.

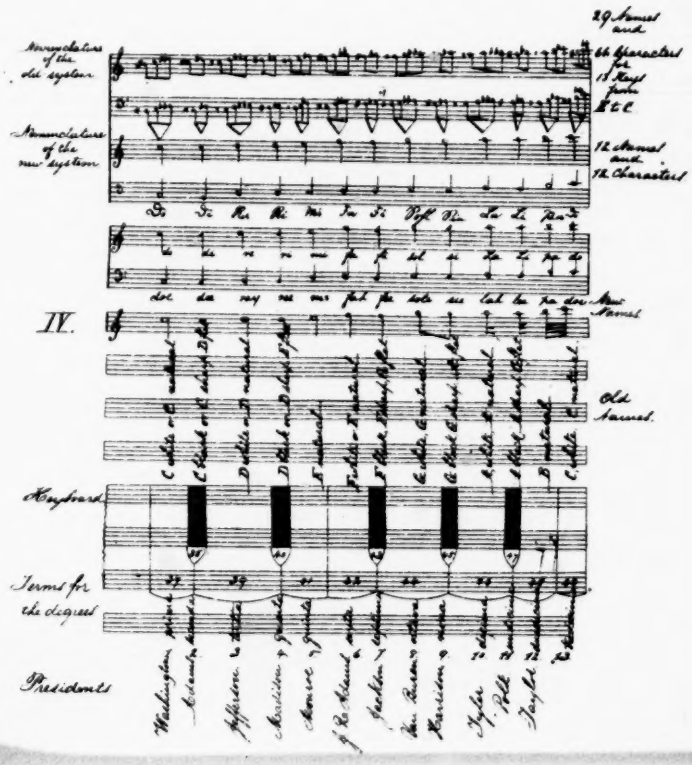
Scales in Syllables answer best for teaching vocal and instrumental music together.

Sheet 9-11 Sheets

E. Von Heeringen,

Musical Notation,

No. 6528. Patented June 12, 1849.



Sheet 10-11 Sheets

E. Von Heeringen,

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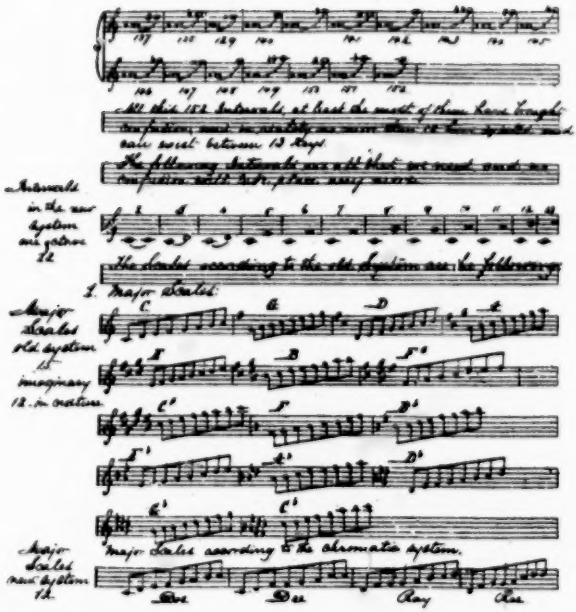
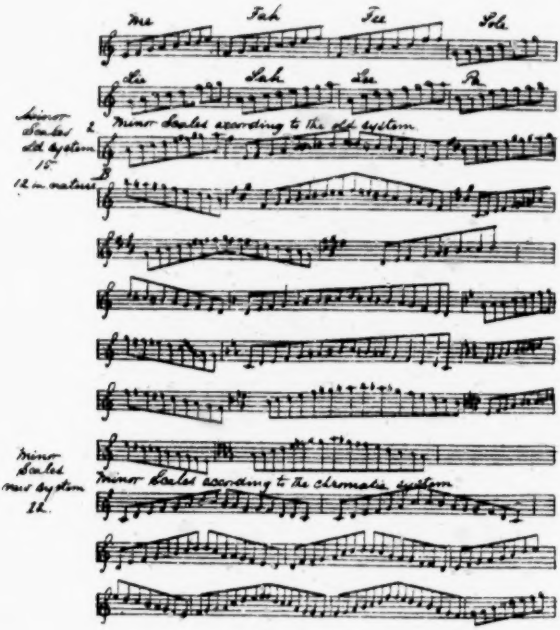

Nos. 110 & 111.
W. S. M. P. Co. v. A. Co.

Sheet 11-11-Sheets

E. Von Heeringen,

Musical Notation.

No. 6528. Patented June 12, 1849.


Minor Scales old system 10 12 in notes
Minor Scales according to the old system.
Minor Scales new system 12.
Minor Scales according to the chromatic system.

(No Model.)

J. DODD.

MUSIC CHART.

No. 452,995. Patented May 26, 1891.

FIG 1

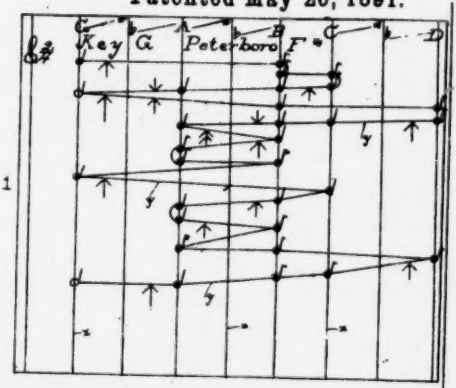
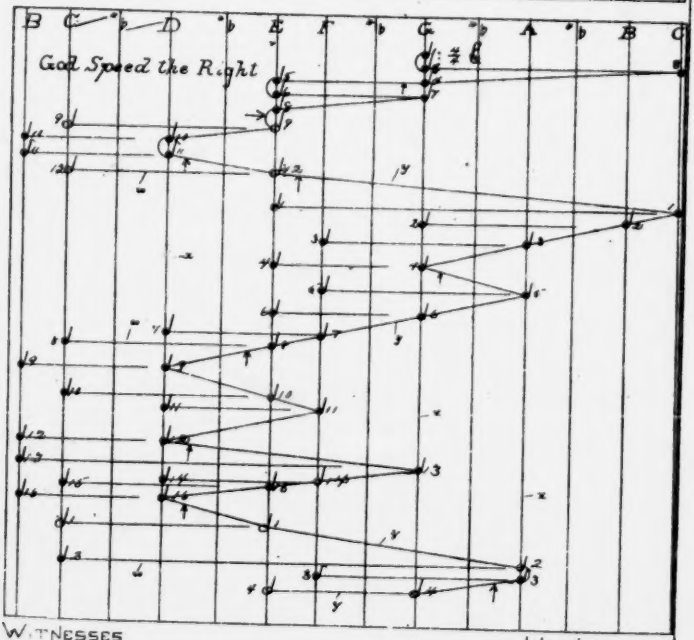


FIG 2



WITNESSES

Fellowes & Brown

INVENTOR

James Dodd

by Wright Brown & Crosby

UNITED STATES PATENT OFFICE.

JAMES DODD, OF BOSTON, MASSACHUSETTS.

MUSIC-CHART.

SPECIFICATION forming part of Letters Patent No. 452,995, dated May 26, 1891.

Application filed August 27, 1890. Serial No. 363,189. (No model.)

To all whom it may concern:

Be it known that I, JAMES DODD, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Music-Charts, of which the following is a specification.

My invention relates to music-charts adapted for use with stringed instruments which have their strings tuned to and used for the production of only one note; also, with organs.

The invention consists in a chart on which are printed or otherwise marked the notes of the tune, said notes being placed in such relative position to each other that when the chart is placed in a given position with relation to a stringed instrument of the class above mentioned each note will be directly in line with the key or string to be touched to produce said note, and an unbroken or practically continuous guiding-line connecting said notes, which indicates the order in which said notes are to be played, all of which I will now proceed to describe and claim.

In the accompanying drawings, forming a part of this specification, Figure 1 shows my improved music-chart in its simplest form, only the air or melody of the tune being written. Fig. 2 shows my improved chart with two parts written together.

The same letters of reference indicate the same parts in all the figures.

In adapting my chart to the piano or organ or other similar instrument I arrange a series of vertical parallel lines *x*, so that they correspond with the keys of the instrument. These vertical lines I prefer to mark with the names of the notes represented by the keys corresponding with them, as A B C, &c. On these vertical lines are written the notes which constitute the tune to be played. In writing these notes I employ the form in common use in the written music of the present day, only writing the notes slightly at an angle, so that while the body portion of the note is on one of the vertical lines the "leg" and "tail" portions are clear of the vertical line, so that the time-value of the note can be readily seen, it being necessary to know only so much of the present common system of written music as teaches the different time-values of the different forms of notes.

When the chart is placed in position above or at the back of the key-board of a piano or other like instrument, the performer strikes the first note at the top of the chart, gives it its proper time, and then proceeds to strike the other notes of the tune in the order indicated by the guiding-line *y*, giving to each note its proper time. It will be seen that by beginning at the upper end of the guiding-line *y* and following said line throughout, striking the key of the instrument corresponding to the vertical line of the chart on which each note touched by the guiding-line is located, (giving to each note the time indicated by its shape or form,) the tune will be produced.

In adapting my chart to the zither or other similar instrument in which the strings are touched directly by the fingers of the performer I arrange the vertical lines *x* to correspond with the strings of the instrument. The notes are written as in the chart for the piano, above described, and are connected by a guiding-line in the manner above set forth.

In using the chart with the zither or similar instrument the chart is placed under the strings or between the strings and the sounding-board, and is arranged in such a way that the vertical lines of the chart are exactly under the strings of the instrument.

In this form of chart I may dispense with the vertical lines *x* and may write the notes on a plain unruled surface, the distances between the notes corresponding to the distances between the strings. In this form of chart the strings of the instrument would, as it were, take the place of the vertical lines, and the chart would be so placed that the notes written for a given string would be directly under that string. It will be readily seen that although the vertical lines may be omitted the notes written for any given string occurring at any part of the tune will be in line with each other vertically.

In Fig. 2 I have shown music containing two parts written in my improved method. The guiding-line *y* indicates the air or melody to which is coupled by the connecting-lines *w* a second part or alto. The connecting-lines *w* are horizontal, and indicate that the note at the outer end thereof is to be played simultaneously with the note on the guiding-line *y* at the other end of the connecting-line

1886

307

w. As an additional guide to the performer I prefer to put a small number alongside of the note, as shown in Fig. 2, the numbers of the notes on the guiding-line being successive, while those of the notes of the second part correspond with the numbers of the notes on the guiding-line to which they are connected. Thus, in the example shown in Fig. 2, the notes marked 9 9 (the notes being C and E) are played simultaneously, as are also those marked 10 10, 11 11, 12 12, &c. For the sake of clearness I prefer to use the smaller numbers, and to this end I begin again at 1 when the numbers have reached to, say, 10 or 16.

I may also write music of two or more parts on my chart by using two or more guiding-lines *y*, one for each part, the notes on each guiding-line being numbered to correspond with the notes on the other guiding-lines with which they are to be played. In writing four-part music I may use either four guiding-lines *y* or I may, as I prefer to do, use two guiding-lines *y*, one for the treble and one for the bass, the forming having the alto connected thereto by connecting-lines *w* and the bass guiding-line having the tenor coupled to it by the same means.

The relative distances between the vertical lines of my chart for the piano being always the same and the musical interval represented by such distance being of course the same, it will be seen that my improved chart can be used for playing a tune in any key. For this reason a tune written on the chart in any key may be quite as readily played in any other key, thus enabling the performer to transpose a tune into any key. This is also true of my chart when constructed for and arranged on a zither or other like instrument which is tuned to the chromatic scale.

I prefer to mark the vertical lines of my chart with the letters now in common use to designate the notes of the scale—viz., A, B, C, D, E, F, G—and I designate the lines occurring between A and B, C and D, D and E, F and G, G and A by putting a "sharp" mark on the left side and a "flat" mark on the right side thereof. I may also put the letter designating the note alongside of the written note whenever the same may occur in the written tune, thus giving an additional help to the performer if he is acquainted with the names of the keys of the piano.

In my chart for piano use I prefer to thicken the vertical line for the black notes used in the key in which the tune is written, thus showing at a glance the number of flats or sharps in the key; but I do not limit myself to this arrangement. I mark the bars by an arrow-head and the double bars by a double-headed arrow-head, touching the guide-line *y* at the point where the bar occurs. Marks of expression may also be written on said guiding-line.

It will be seen that my improved music-chart is eminently adapted for simple music for the use of children and other beginners, it being necessary only that the performer should know the time-value of the written notes to enable him to produce the written tune by following the guiding-line of my chart.

I do not limit myself to the precise details here shown and described, but may variously modify the same without departing from the nature and spirit of my invention.

I claim—

1. The music-chart hereinbefore described, composed of a series of arbitrary vertical lines corresponding to the keys of a piano or other like instrument or to the strings of a zither or other like instrument, notes written on said lines, and a continuous guiding-line extending across the clear spaces between the arbitrary vertical lines and extending unbroken throughout the entire series of notes, connecting the same in the order in which they are to be played in order to produce a melody or tune, as set forth.

2. The music-chart hereinbefore described, composed of a series of arbitrary vertical lines corresponding to the keys of a piano or other like instrument or to the strings of a zither or other like instrument, notes written on said lines, letters designating said notes written beside the same, and a continuous guiding-line extending unbroken throughout the entire series of notes and connecting the same in the order in which they are to be struck in order to produce a melody or tune, the spaces between the arbitrary vertical lines being uninterrupted, except where they are crossed by said guiding-line, as set forth.

3. The music-chart hereinbefore described, composed of a series of arbitrary vertical lines corresponding to the keys of a piano or other like instrument or to the strings of a zither or other like instrument, notes written beside said notes indicating their consecutive order, and a continuous guiding-line extending unbroken throughout the entire series of notes and connecting the same in the order in which they are to be struck in order to produce a melody or tune, the spaces between the arbitrary vertical lines being uninterrupted except where they are crossed by said guiding-line, as set forth.

4. The music-chart hereinbefore described, composed of notes written at distances apart corresponding to the spaces between the strings of a zither or other like instrument, and a continuous guiding-line extending throughout the entire series of notes and connecting the same in the order in which they are to be struck, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 22d day of August, A. D. 1890.

JAMES DODD.

Witnesses:
C. F. BROWN,
EWING W. HAMLEN.

COPY BOUND

187

Nos. 110 & 111.
W. S. M. P. Co. v. A. Co.

F. W. ACEE.

Musical Notation.

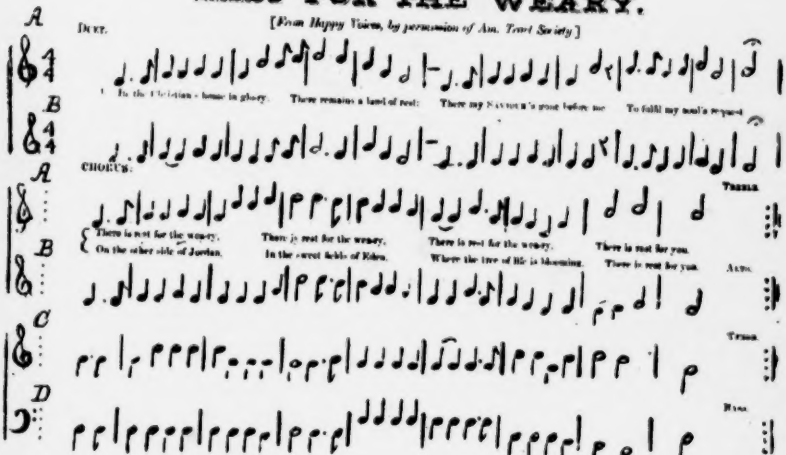
No. 122,096.

Patented Dec. 26, 1871.

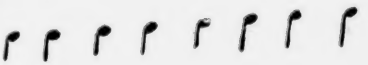
ILLUSTRATION.

REST FOR THE WEARY.

[*From Happy Voices, by permission of Am. Tract Society.*]


A
DUET.
B
CHORUS.
TREBLE.
There is rest for the weary. On the other side of Jordan.
There is rest for the weary. In the sweet fields of Eden.
There is rest for the weary. Where the tree of life is blooming.
There is rest for you. There is rest for you.
ALTO.
C
TENOR.
D
BASS.

ALPHABET OF COLORED NOTES:



Natural Scale, Key of C. **Do. Ra. Me. Fa. Sol. La. Se. Do.**

Rej. Dec. 14/91
Brief Filed 1/3/91

O CLOSE IN CENTER

COPY BOUND

188

122,096

UNITED STATES PATENT OFFICE.

FIELDING WALLACE ACEE, OF COLUMBUS, GEORGIA.

IMPROVEMENT IN MUSICAL NOTATION.

Specification forming part of Letters Patent No. 122,096, dated December 26, 1871.

I, FIELDING WALLACE ACEE, of Columbus, in the county of Muscogee, State of Georgia, have invented certain Improvements in Music-Notes, of which the following is a specification:

This invention relates to an improvement on music-notes. In modern music there are seven primary notes used, the eighth being a repetition of the first, and perfecting an octave of the scale.

The first seven letters of the alphabet are used to represent the degrees of the scale, which are written on the staff, the eighth letter being a repetition of the first. These letters are called by seven syllables—viz., Do, re, mi, fa, sol, la, si, and do—and are applied to a like number of uniform black characters, called notes, printed on the lines and spaces of the staff.

Before any one can read or sing a piece of music he must become perfectly acquainted with the scale of letters written on the staff, with the transposition of the keys, signs, &c., which involves an amount of study and research that few of the masses ever acquire. After having the information before mentioned, it requires a quick perception, a true eye, and a ready memory to read correctly the notes of a tune; and professors often commit errors in reading or singing new pieces.

In the colored notes, which consists of an application of seven distinct colors to the seven notes of the scale, the eighth being a repetition of the first, the singer is never at a loss to call the notes by their proper names, though written in the same way on the lines and spaces of the staff, yet each note bearing a distinct color is at once known and designated. The pupil does not depend altogether upon the position of the note on the scale to designate it, but is at once assisted by the color. Another advantage is also obtained in sounding the notes. Having once learned the relative position of each colored note on the scale, so soon as he sees the note he is more quickly prepared to give it the correct sound. I have adopted the following colors as the most distinct and suitable for the notes of the scale: (See alphabet in illustration:) Green, yellow, red, brown, blue, black, and pink, applied to the syllables do, re, mi, fa, sol, la, and si. The shape of the notes are the same as used in all modern music. The arrangement of each piece and each part in every piece is in harmony with the key-note, (see in illustration "Rest for the Weary"—treble, alto, tenor, bass,) which governs the position of the colored notes on the lines and spaces of the staff. The application of color to the notes of the scale in music brings the heretofore difficult and beautiful art of singing by note, which is the only correct method, within the reach of every one.

By this improvement the pupil will be able, after committing to memory the alphabet of colored notes, learning to sound the notes of the scale, and to keep the time correctly, to read at sight and sing correctly and rapidly any piece of music presented to him.

In the illustration the colored notes have been applied to the tune called Rest for the Weary—A, the treble; B, the second treble or alto; C, the tenor; D, the bass; E, the alphabet of colored notes; F, the syllables of the notes.

What I claim and desire to secure by Letters Patent, is—

The method of musical notation herein described, each of the seven notes of the scale being indicated by a distinctive color, as shown, and for the purpose set forth.

F. W. ACEE.

Witnesses:
F. G. BLAU,
J. L. DOZIN.

(102)

TO CLOSE IN CENTER

Nos. 110 & 111.

W. S. M. P. Co. v. A. Co.

2 Sheets—Sheet 1

J. B. D. BLACK.

Method of Marking the Keys of Keyboards for Musical Instruments.

No. 229,365. Patented June 29, 1880.

Fig. 1.

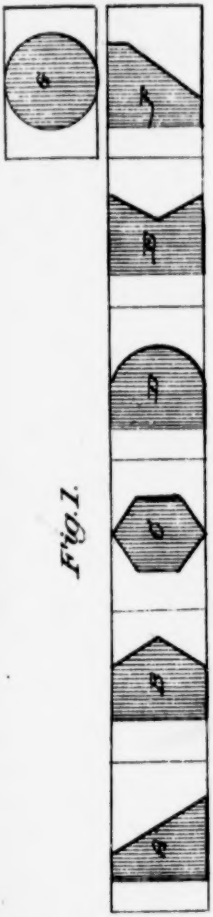
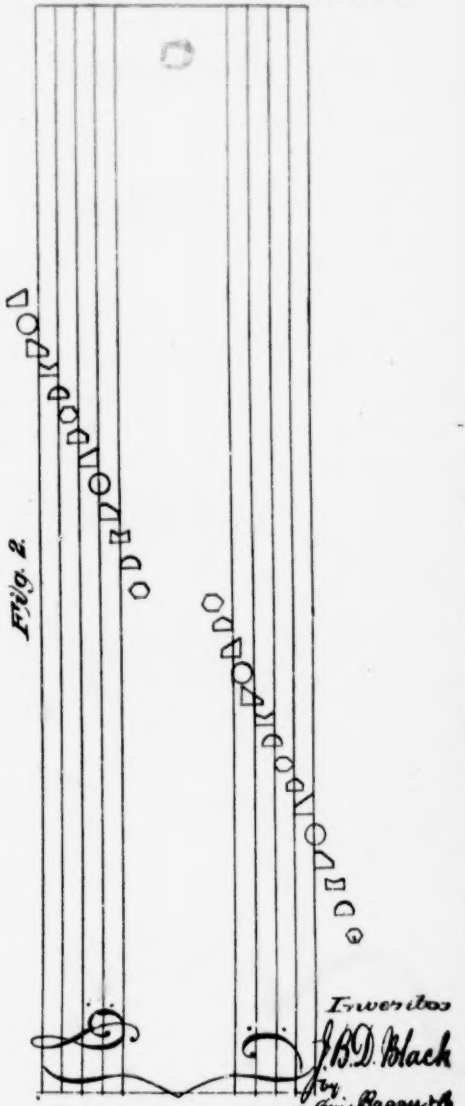


Fig. 2.

Witnesses
Fred. G. Dieterich
B. L. Dieterich.

Inventor
J. B. D. Black
by Louis Bagger & Co.
Attorneys

Nos. 110 & 111.

W. S. M. P. Co. v. A. Co

2 Sheets—Sheet 2.

J. B. D. BLACK.

Method of Marking the Keys of Keyboards for Musical Instruments.

No. 229,365. Patented June 29, 1880.

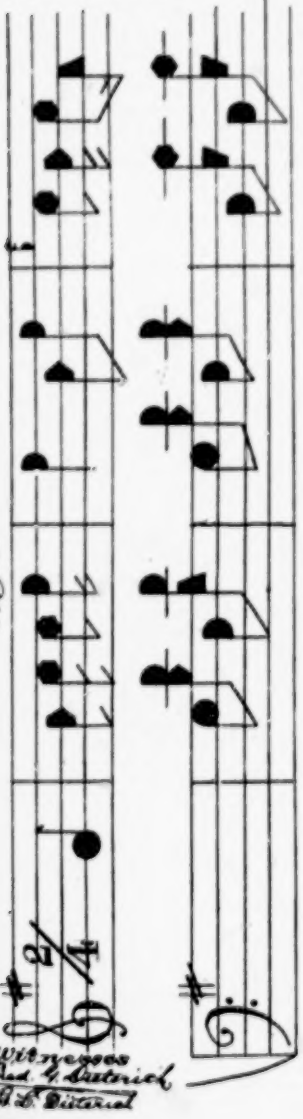


Fig. 1.

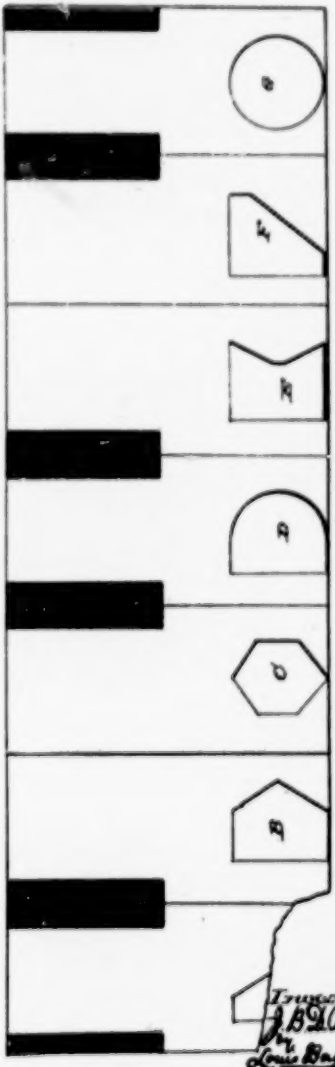


Fig. 4.

Witnesses
Chas. G. Patrick
H. C. Dieterich

Inventor
J. B. D. Black
by Louis Bagger & Co
Attys.

COPY BOUND

UNITED STATES PATENT OFFICE.

JANE B. D. BLACK, OF GREEN HILL, TEXAS.

METHOD OF MARKING THE KEYS OF KEY-BOARDS FOR MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 230,365, dated June 29, 1880.

Application filed February 14, 1880.

To all whom it may concern:

Be it known that I, JANE B. D. BLACK, of Green Hill, in the county of Titus and State of Texas, have invented certain new and useful Improvements in the Method of Marking the Keys of Key-Boards of Piano-Fortes and other Keyed Instruments; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 represents the system of musical notation upon which my invention is based. Fig. 2 represents this system as applied upon the staff from which the notes are read. Fig. 3 represents the opening bars of a piece of music—"Home, Sweet Home"—arranged for the piano or organ according to the said system of notation or method of designating the notes as illustrated in the foregoing figures; and Fig. 4 represents two octaves of the key-board of a piano, the keys of which are marked, in the manner hereinafter described, to correspond to the notes indicated by the aforesaid system of notation.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has for its object to facilitate the teaching of music, especially with reference to piano-fortes, organs, and keyed instruments of a like nature, by marking the keys of the instrument in a manner to correspond to the notes which they represent; and for this purpose I employ a system of musical notation in which the several notes or note-symbols are shaped so as to approximate in appearance the shape of the letters from which they derive their appellations, substantially as hereinafter more fully set forth.

The said improved system of notation upon which my invention is based consists in making the outline of each note resemble the outline of that particular letter of the alphabet after which it is named, as will appear more clearly by reference to Fig. 1 of the drawings.

By making the notes in this manner suggest their own names or designations, their reading is greatly facilitated as compared with the arbitrary symbols in general use, while on the other hand their shape is not so different or remote from the old system as to make it difficult for those accustomed to that to read music which has been written or printed according to this improved system, and no one familiar with music will have any difficulty in reading the bars represented in Fig. 3 of the drawings.

To enable the pupils to find and fix in their memory the corresponding keys on the piano, I mark the white keys of this with symbols the shapes of which correspond to those of the notes they represent, as shown in Fig. 4. These symbols or figures may be made of any suitable black substance—such as india-rubber, thin leather or pasteboard, sticking-plaster, or any other suitable material that will present a slightly-raised surface to the touch of the pupil or performer; or, if preferred, the keys may be engraved or recessed to form the outline of the note-symbol and the recess filled with any suitable black substance or compound in a plastic state which, when dry, will be sufficiently hard to resist the wear caused by operating the keys in performing upon the piano or organ, as the case may be.

I have found by experience that the tedious task of teaching children to play the piano-forte is robbed of much of its difficulty by this method; also, that it requires the constant attention of the teacher in a less degree, because the pupils may practice by themselves, inasmuch as both the notes and the keys are marked with corresponding symbols indicative of their names.

I am aware that it is not new to employ in musical notation note-symbols having a contour like that of the letters from which they derive their nomenclature, nor do I claim such a system of notation; but

I claim as my invention and desire to secure by Letters Patent of the United States—

The described method of marking the keys of the key-board of a piano or organ, consisting in affixing upon each of the white keys in the octave a sign or symbol having a raised surface corresponding in outline to the shape of the note the name of which corresponds to that of the key, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JANE B. D. BLACK.

Witnesses:
JOHN N. GRIGSBY,
P. J. BLACK.

TO CLOSE IN CENTER

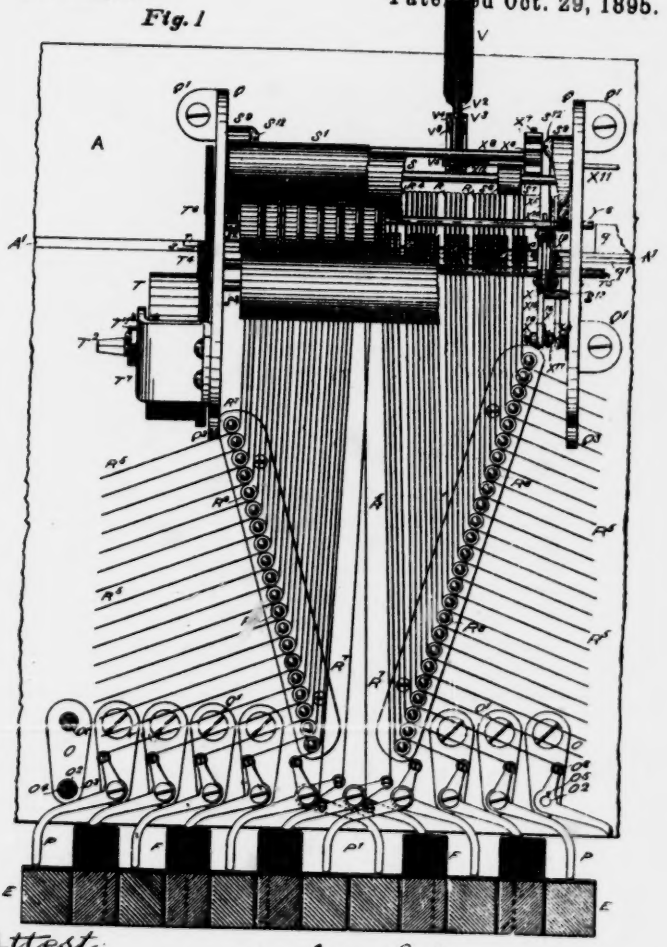
(No Model.) 4 Sheets—Sheet 1.

J. L. CANTELO.

MUSIC RECORDER FOR PIANOFORTES.

No. 549,057. Patented Oct. 29, 1895.

Fig. 1



Attest,
Geo. Breidme
C. B. Bull.

John L. Cantelo, Inventor,
by Dodger & Lowe
Attys

Nos. 110 & 111.
W. S. M. P. Co. v. A. Co.

(No Model.) 4 Sheets—Sheet 2.

J. L. CANTELO.

MUSIC RECORDER FOR PIANOFORTES.

No. 549,057. Patented Oct. 29, 1895.

Fig. 2.

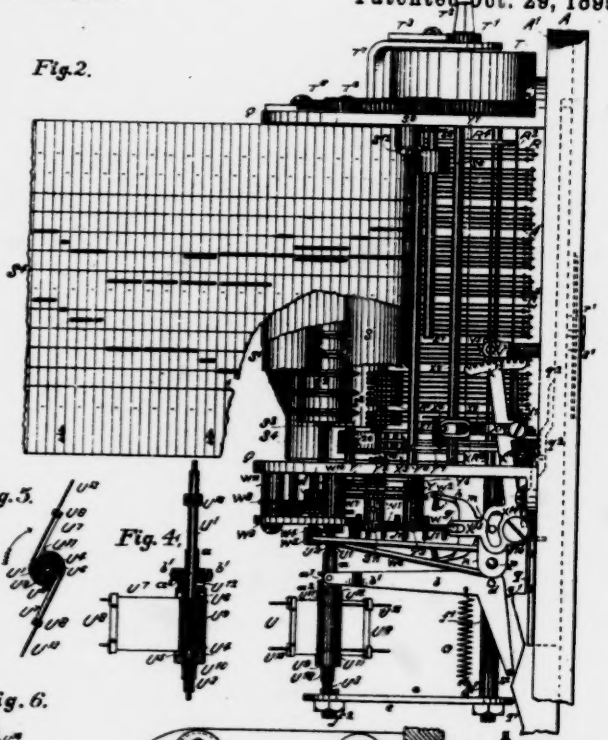
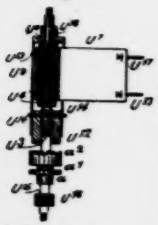


Fig. 5.

Fig. 4.

Fig. 6.



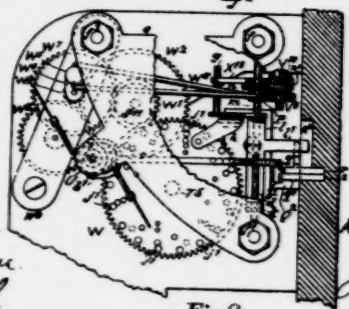


Fig. 3.

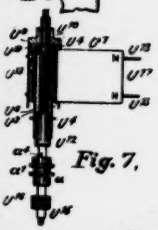


Fig. 7.

Attest,
Wm Burdine
C. B. Bull

Inventor
John L. Cantelo
by Dodger & Sons
Attys

(No Model.) 4 Sheets—Sheet 3.

J. L. CANTELO.

MUSIC RECORDER FOR PIANOFORTES.

No. 549,057. Patented Oct. 29, 1895.

Fig. 8.

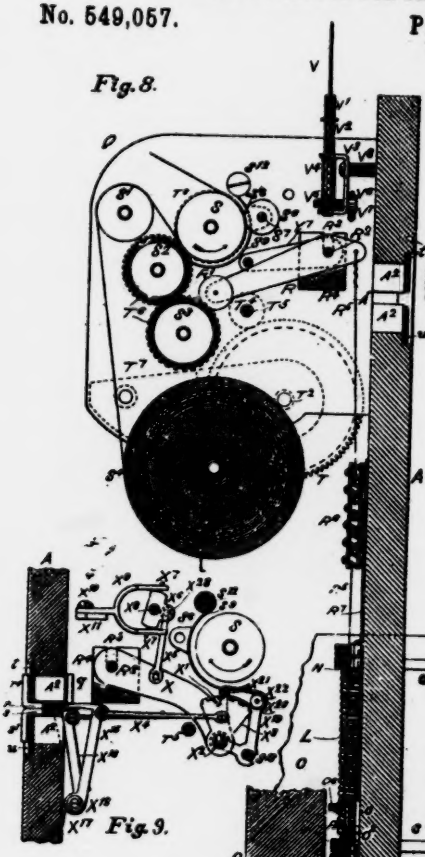


Fig. 11.

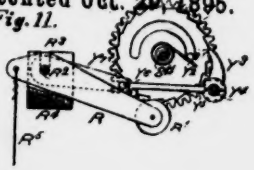


Fig. 10.

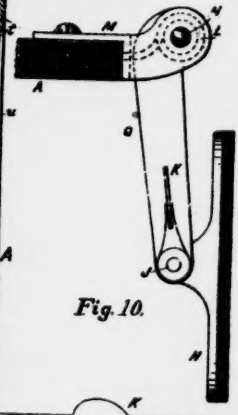
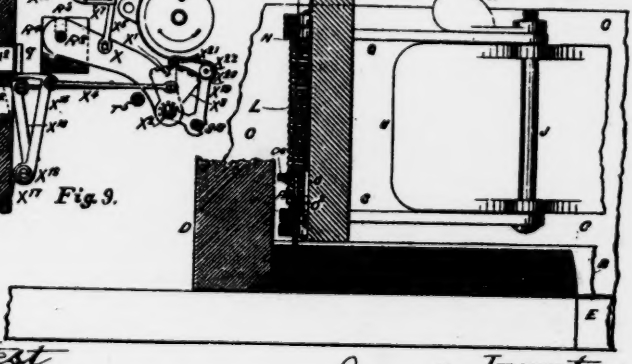


Fig. 9.



Attest
C. C. Burdine
C. B. Pull.

Inventor
John L. Cantelo,
by Dodger Sons, Attys.

(No Model.) 4 Sheets—Sheet 4.

J. L. CANTELO.

MUSIC RECORDER FOR PIANOFORTES.

No. 549,057. Patented Oct. 29, 1895.

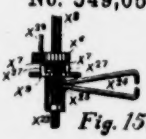


Fig. 15.

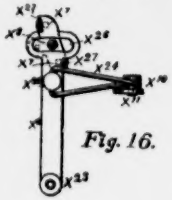


Fig. 16.

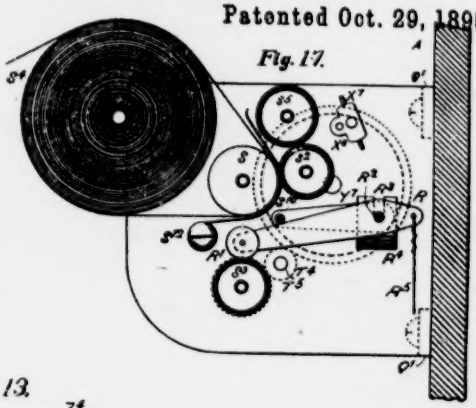


Fig. 17.

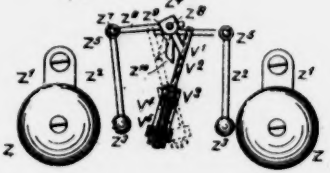


Fig. 13.

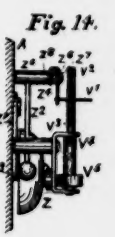


Fig. 14.

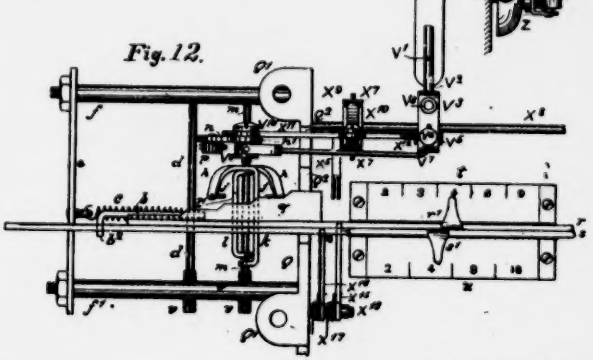


Fig. 12.

Attest,
Leo. Burdine.
C. A. Bull

Inventor
John L. Cantelo
by Dodge & Sons
Attys.

COPY BOUND TO

UNITED STATES PATENT OFFICE.

JOHN LOUIS CANTELO, OF LIVERPOOL, ENGLAND.

MUSIC-RECORDER FOR PIANOFORTES.

SPECIFICATION forming part of Letters Patent No. 549,057, dated October 29, 1895.

Application filed January 11, 1895. Serial No. 534,545. (No model.)

To all whom it may concern:

Be it known that I, JOHN LOUIS CANTELO, a subject of the Queen of Great Britain, residing at Liverpool, in the county of Lancaster, in the Kingdom of England, have invented certain new and useful Improvements in Music-Recorders for Pianofortes or other Similarly-Keyed Musical Instruments, of which the following is a specification.

The object of my invention is to improve and render more generally useful and effective that class of recording attachments for pianofortes or other musical instruments having keyboards of similar form which enable a player to register the score of a musical composition on a running band of paper in such manner that it may be readily transcribed afterward into the ordinary musical notation.

In the accompanying drawings, Figure 1 is an elevation of the recording apparatus looking from the back of the piano-keys, the paper-roll and motor-train being removed and other parts broken away. Fig. 2 is a plan view of same with the paper-roll, motor-train, and flying governor in place. Fig. 3 is a side view of the motor-train. Figs. 4 and 5 show the construction of the governor; Figs. 6 and 7, somewhat modified arrangements of same. Fig. 8 is a vertical section of the frame-board of the apparatus, showing also the manner in which it is attached to the piano and the means employed to impress note-marks upon the paper band. Fig. 9 is a side view of the means by which the time fractions are impressed at the end of each measure. Fig. 10 is a plan view of a spring-arm, of which two pairs are used to attach the frame-board to the piano. Fig. 11 shows the ratchet and detent which stop and start the train. Fig. 12 is a front view, with the frame-board removed, of the sliding indices, with the time beating, regulating, and impressing parts to which they are related. Figs. 13 and 14 show a method of striking the time-beats audibly. Figs. 15 and 16 show an alternative method of transmitting movement to the time-printing lever at the end of a measure. Fig. 17 shows a variation which may be sometimes desirable in the relative positions of the paper-roll and the rollers connected with the feeding, marking, and ruling of the paper band.

In carrying out my invention I provide support for the mechanism by a frame-board A, which may be of wood, papier-maché, or other suitable material, its suitability consisting in its possession of the requisite strength, combined with the qualities of lightness in weight, durability, and freedom from any considerable tendency to warp under the influence of change in the temperature or moisture of the air. When in position, this board stands with the ends of its lower edge resting on the key-blocks of the piano, one of which is shown and marked B in Fig. 8. The board is placed as near the backs of the keys as possible and is held in its edgewise position with sufficient firmness by arms G G, Figs. 8 and 10, which, with their connected parts, are practically in duplicate at each end of the board. The arms G G are rigidly connected by a rod N, upon which is coiled a spring L, having one of its ends turned into a hole in an angle-plate M, as shown by the dotted lines in Fig. 10, and its other end secured in any suitable convenient manner to the rod N or to one of the arms G G. Through the free ends of the arms G G passes a bolt J, which has a thumb-lever K screwed upon its threaded end.

H is a sole-piece having perforated lugs projecting from its back, by which it is pivoted on the bolt J, between the arms G G. The face of the sole-piece bears a pad, as shown in Fig. 10, to prevent abrasion of and increase its adhesion to the piano-cheek, against which it normally rests.

In placing the frame-board with its attached mechanism upon the musical instrument the spring-arms G G are turned toward the front and middle of the board on their pivots in the lugs projecting from the angle-plates M, as shown in Figs. 8 and 10, against the pull of their helical springs L, by passing the fingers under and pulling upon the rods J at each end. The board is placed in position on the keyboard with the contact-levers, hereinafter to be described, resting upon their corresponding keys E and F. Each pair of spring-arms G G is then allowed to carry its attached sole-piece flatly against the cheek C at the corresponding end of the piano, and the thumb-lever K, being turned at each end, secures the sole-pieces by clamping them between the com-

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pressible arms G G in each case. As long as the angles of the sole-pieces H relative to the corresponding pair of arms G G remain unaltered the frame-board will remain correctly in position on the keyboard of the piano. It will be seen that this arrangement allows of the same recording-instrument being used upon pianos of which the keyboards differ in length within certain limits. When the frame-board is removed, the spring-arms G G fold behind it, the sole-pieces H resting flatly against its back, provision of course being made to prevent their coming in contact with any of the mechanism secured thereto. Other suitable means of clamping the frame-board in the aforesaid position may, however, be adopted.

Upon the back of the frame-board are secured hangers O O by means of binding-screws O' O', Figs. 1 and 8, and these hangers bear at their lower ends fulcrum-screws O^2 O^2, upon which turn flat contact-levers P P. These levers P P are given a tendency to turn downward toward the keys E E F F by means of springs similar to O^3, bent round the fulcrum-screws O^2 O^2 and secured to the lever by turning up one end of the spring to form a short projection O^4, which enters a perforation O^5 in the contact-lever.

The other end of the spring is secured to the hanger O in a similar manner. When two contact-levers turn in opposite directions upon a single fulcrum-screw, a spring is secured in a similar way between them. This is the case at P′ in Fig. 1, where it will be observed also that hangers are dispensed with and the fulcrum-screws enter the frame-board itself. By deflecting the hangers the positions of the contact-levers may be adjusted to suit variations in width of keyboard which may arise from any difference in the key-width used by various makers. Those variations which occur in the positions of the black keys with respect to the white ones are also provided for by this arrangement.

There are fulcrumed upon the back of the frame-board A as many of the contact-levers P P as there are keys E E F F of which the action is to be recorded; but it has not been thought necessary in the drawings herewith to show more than one octave, as all the others are exactly similar in form and action.

In a suitable part of or projection from each contact-lever P is secured a wrest-pin O^6 in such manner by riveting or otherwise that it turns stiffly when a screwdriver or suitably-formed key is applied to its free end.

Brackets Q Q are secured to the upper part of the frame-board A by screws which pass through lugs Q' Q'. These brackets Q Q carry a comb R^4, having leaf-like teeth, between which pass thin marking-levers R, pivoted on a rod R^3, lying in a series of notches R^5, cut downward into the leaves of the comb. Openings are made in the brackets Q Q, so that the rod R^3 may be wholly or partially withdrawn endwise from the comb R^4 to allow of a lever pivoted therein being removed without disturbing the rest. Said comb may be formed in any convenient manner either by building it up from separate pieces or by cutting a series of kerfs in a solid bar. It is fastened to the brackets Q Q by screws, the head of one being shown in dotted lines beneath the slide *l* in Fig. 3.

To the shorter arm of each marking-lever R is attached a cord or flexible wire R^1, which is carried down and secured to the wrest-pin O^6 in a corresponding lever P. The marking-levers are made in two sets having the holes for attachment of the cords R^1 at different distances from the pivot R^2. Said levers are arranged in the comb R^4 alternately from each set, as shown in Fig. 2, in order that neighboring cords may clear each other near the points of attachment. As in nearly all cases it is necessary to change the direction of the cord or wire at some point in its course, this is done by passing it partially round a grooved pulley R^6, as is shown in Figs. 1 and 8, the former figure also showing that the pulleys R^6 are arranged closely together as far as possible in order that the edge of one may prevent the wire or cord which passes round its neighbor from slipping out of its proper groove. The pulleys are preferably mounted, as shown in Fig. 1, on pins fixed in strips of metal R^7, which are afterward screwed to the frame-board A. The longer arm of each marking-lever R carries a pin on one side, which forms a pivot for a marking-disk R'. Said marking-disks rest normally upon an inking-roller S^2, pivoted between the brackets Q Q. The brackets Q Q also carry a roll of paper S^4 to be used in making the record, which roll is supported on books Q^3, Fig. 1, but shown more clearly in dotted lines, Fig. 8, a ruling-roller S^3, which makes contact with the paper S^4 and prints thereon the continuous staff and dotted leger lines shown in Fig. 2, being inked by the roller S^2, an impression-roller S, partially round which the paper S^4 is carried, and a roller S', intended to keep the paper from contact with the rollers S^3 and S^2 on its way to the impression-roller.

In Figs. 1, 2, 8, and 9, S^9 are marginal guides, each held in place by a screw S^{13}, which guides assist in starting the paper band correctly on its way round the impression-roller. From the outer edges of the guides S^9 are turned back lugs S^8, in which is pivoted a rod S^7, bearing rollers S^6, intended to clip the paper in contact with the impression-roller S, thus securing its continuous movement therewith. The object of pivoting the rollers S^6 in this manner is that their pressure on the impression-roller may be adjustable and elastic.

On the outer side of one of the brackets Q is mounted a spring-drum T, which may be wound by the squared end T^2, projecting through and supported by a bracket T^2, Figs. 1 and 2.

T′ is the usual ratchet, and T^3 the detent pertaining thereto, which is kept in place by

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a spring or by a counterpoise, as shown. The motion of the spring-drum is transmitted by a pinion T^4 and rod T^5 to a train of wheels mounted on the outside of the other bracket, as shown in Figs. 2 and 3. Of this train the wheel W gives motion to the pinion W', mounted on the impression-roller journal, which thus obtains rotary movement and transmits the same to the rollers S^2 and S^3 by means of toothed wheels T^6 at the other end. The outer pivots of the train-wheels W^7 and W^8 are carried by a narrow plate W^9, which is held at one end upon a hollow post W^{10} by a shoulder formed on a post f^2 and at the other end on a hollow post W^{11} by a screw, both screw and post f^3 entering the bracket Q.

The speed of the train is controlled by a flying governor constructed as follows: The wheel W^8, which is the last of the train, gears with a pinion U^{16}, and thus rotates a spindle U'. In this spindle is formed a longitudinal groove U^2, and upon it a helical thread U^6, as shown in Figs. 2 and 4. U^4 is a hollow roller having a stud U^5, which enters the groove U^2, so that the roller U^4 can only have a sliding movement relative to the spindle U'. Within the roller U^4 and surrounding the spindle U' is coiled a helical spring U^6. To opposite sides of the roller U^4 are attached the inner ends of ribbons U^7, which ribbons may be made, preferably, of metal foil; but a somewhat stiff thin woven fabric or tough paper will in most cases serve almost equally well, save in respect of durability. The roller U^4 is inclosed within a cylindrical case U^9, and the free ends of the ribbons U^7 pass out through corresponding slits U^{11}, formed in opposite sides thereof. Through the solid end U^{10} of the case U^9 is cut a thread, which is a counterpart of that on the spindle at U^3. The other end of the case is closed by a disk U^{12}, which is perforated for the passage of the spindle U' and has crown ratchet-teeth formed on its outer face, as shown. A pair of parallel ribbon-supporting wires U^{13} is attached to each side of the case and project outward therefrom near the sides of the slits U^{11} therein. Each pair of supporting-wires U^{13} passes through guide-hooks formed on a clasp attached to the outer end of each ribbon, as at U^8, or through loops formed in the ribbon end itself, as shown at U^{17} in Figs. 6 and 7. Upon the spindle U' is placed a sliding sleeve *a*, having teeth formed upon the end a^3 opposed to the ratchet-disk U^{12}. This sleeve *a* is kept from turning on the spindle U' by a stud a^2, which enters the groove U^2; but its lateral position thereon may be altered by movement of a lever *b*, of which the forked end *b'* engages the annular groove a', as shown in Figs. 2 and 4. The helical spring U^6 is attached at one end to the hollow roller U^4, within which it lies, and at its other end to the ratchet-disk U^{12}, its tendency being to turn the case U^9, with the attached parts, in the direction toward which the fly normally turns when set in motion. (Shown in Fig. 5 by the curved arrow.)

This rotary movement winds the ribbons one on the other round the hollow roller U^4, while the case travels laterally along the spindle away from the sleeve *a* owing to the helical thread U^3. The ribbon-roller U^4 also moves with the case, being pushed along the spindle by the back of the ratchet-disk U^{12}.

It will be seen that the mouth of the central hollow in the roller U^4 is closed by and turns upon a shoulder formed at the back of the crown ratchet-disk U^{12}. Normally a portion of each ribbon end protrudes through the slits U^{11} in the case U^9, and when the train is set in motion the resistance of the air against these ends U^7 is sufficient to overcome the tension of the spring U^6, and the case U^9 consequently rotates upon the spindle, carrying the ratchet-disk U^{12} spirally forward until its teeth meet and interlock with the similar ones opposed to it on the sleeve *a*. The rotary movement of the case U^9 relative to the spindle U' is now arrested, and the ribbons, which have been more and more unwound, as a consequence thereof cannot be further protruded without altering the position of the sleeve *a* by moving the lever *b*. The protruding ribbon ends form the vanes of the fly, and as their spread is clearly governed by the position of the lever *b*, that lever is used, as will presently be shown, to regulate the speed of the motor-train. Upon stoppage of the motor-train the spring rewinds the ribbons within the case U^9. As the fly-vanes make their minimum speed at the beginning of motion, the motor-train is enabled the more quickly to overcome the inertia of the moving parts and ride to the maximum speed allowed by the regulating-lever *b*. More than two ribbons may be used in constructing the fly, if desired.

In Fig. 6 is shown a variation from the construction just described. Here the ribbon-case U^9 turns upon but has no lateral movement relative to the spindle U', it being limited in this respect by the collar U^{15} and the ribbon-roller U^4, which are both fixed upon the spindle. The spring U^6 is fastened at one end either to the roller, within which it lies, or to the spindle itself, and its other end is connected with the case, to which it gives the same tendency to wind up the ribbons as in the other construction just described. The ratchet-disk now becomes a sleeve having a thread cut within it to fit the one on the spindle and also bearing pins or studs U^{14}, which project through the slits in case U^9, the latter being made somewhat longer than that before described. As thus arranged the case simply rotates under spring-tension or air-pressure, while the crown ratchet-sleeve U^{12} alone has the spiral movement along the spindle U' relative to the annularly-grooved sleeve *a*. This construction may be somewhat simplified, when the spindle U' is of sufficient length, by placing the spring U^6 upon the spindle behind the case U^9, near the fixed collar U^{15}. In this arrangement the ribbon-roller may be

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dispensed with and the vane-ribbons wound directly upon the spindle, a collar, such as U^{19} in Fig. 7, being placed within the case to prevent lateral forward traverse.

In Fig. 7 is shown still another modification of the fly construction which may be adopted without departing from the nature of my invention. Here the case U^9 is fixed upon the spindle U', while the ribbon-roller has a simple rotary movement relative thereto, its lateral traverse thereon being prevented by the fixed collar U^{19} within its cavity. The crown-ratchet is connected with the roller U^4 in the manner already described with reference to the case U^9 in Fig. 6, while the spring U^6, fastened at one end to the collar U^{19} and at the other to the roller U^4, always tends to wind the ribbon within the case; but instead of air-resistance it is in this construction the pull of centrifugal force upon the normally-protruded ends that unwinds the vane-ribbons when the train is set in motion. In order to prevent jamming when the ratchets interlock, the teeth upon the disk U^{12} and sleeve a, or upon one of them, should be so formed that their backs are parallel with the spiral threads of the screw U^2. Instead of a complete set of ratchet-teeth being formed both upon the disk U^{12} and sleeve a a single tooth upon one of them can be used, as shown at a^4 in Fig. 7.

The constructions shown in Figs. 6 and 7 require no longitudinal groove in the spindle U' if that part of it marked U^{13}, upon which the sleeve a slides, be squared. The fly is pivoted at one end in the bracket Q and at its other and outer end in a plate e, Figs. 2 and 3, said plate being partially broken away in the latter figure to show the parts beyond. This plate e is supported by the posts f, f', and f^3, which project from the train-bearing bracket Q. In the post f is pivoted the upper end of a rod m, of which the lower end is carried by a hollow formed in the tip of a screw—one of two marked v v in Fig. 12. Near the upper end of this rod m is rigidly fixed a lever n, having a loose stud p, one arm of which stud p is connected by a link W^6, made of wire, with another similar loose stud W^3 in the arm W^4, attached to the pivot of the wheel W^7 and pinion W^3, as shown in Figs. 2 and 3. In consequence of this connection the lever n is reciprocated as the arm W^4 rotates when the train is in motion. Another arm of the lever n, which is marked n', carries a screw V^{10}, and upon the projecting part of this screw V^{10}, below the arm n', is screwed loosely a collar V^9. In this collar is pivoted the forked end of a link V^7, Fig. 12, of which the other end is bent upward and screwed through a loose stud V^4 in a Y-shaped carrier V^5, swinging upon a screw V^3, fixed in the frame-board A.

The screwed collar V^9, turning on the screw V^{10} in arm n', is used as a convenient means of insuring that the link V^7 shall turn upon the same vertical axis as a lever X^{11}, presently to be described. This lever should be approximately in line with the axis of the stud V^4 in the carrier V^5. The body of the link V^7 is preferably screwed into the fork which forms one of its ends in order that any slight variation in its length that may seem desirable can be easily made. In the Y-shaped carrier V^5 is a vertical rod V^2, upon which is fixed a sleeve V^1, bearing a pinion V^3, Fig. 8, the object of the sleeve being to keep the rod V^2 in place. In the upper end of the rod V^2 the arm V is hinged on a pin V', passing through them both. This arm V beats back and forth after the manner of a metronome-arm when the train of wheels is in motion, owing to the reciprocating movement of the lever n being transmitted through the link V^7 to the hanging carrier V^5. The arm V is made of light and thin material, so that its normal edgewise oscillation may meet with but slight resistance from the air. The purpose of the hinged connection of the arm V with the rod V^2 is to permit of the arm being turned down below the edge of the frame-board A when the recording apparatus is not in use or is being moved about. The friction between the arm V and the sides of the slot in which it turns is sufficient to keep it in line with the rod V^2 when turned up.

The pinion V^3 is engaged by a toothed segment X^{10}, Fig. 2, terminating the longer arm of a lever X^{11}, which lever is pivoted on the screw V^{10} in arm n' of the reciprocating lever n, and consequently moves bodily therewith.

The shorter arm of the lever X^{11} is slotted at X^{11} for the passage of the rod m and is notched at X^{12} for a rod g, rising from an oscillating fork h h, which is integral with and projects from a slide K, mounted freely upon the rod m, bearing the reciprocating lever n, Figs. 3 and 12. Within the oscillating fork h h and between pins j j, projecting therefrom, rotates the edge of a wheel W, forming one of the motor-train. This wheel has several concentric rows of pins J' projecting from its sides. Upon the rod m is mounted a slide l, as is shown most clearly in Fig. 12, which slide l supports the slide k, carrying the oscillating fork h h, being itself supported by a projection l', resting on a slide r. Movement of this slide r is made to regulate the height of the oscillating fork h h, so that the pins j j may be brought opposite the path of any one of the rows of pins j' j' in the sides of wheel W. The pins j' j' in the wheel W are so spaced in each row that one may be brought opposite one of those in the fork h h at regular intervals, which intervals correspond for each row with a different fixed number of beats of the metronome-arm V. This result is secured by giving the arm W^4 a certain suitable rate of speed relative to the wheel W. In the present case the arm W^4 makes eighteen revolutions for every one of the wheel W, and as a consequence thereof the arm V makes thirty-six beats in the same time. This number thirty-six is a common

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multiple of the intervals of two, three, four, six, and nine beats, respectively, provided in the machine shown in the accompanying drawings. This invention, however, is not limited to these five intervals, but the number may be either diminished or increased by a suitable alteration of the size and relative speed of the train-wheels, the rows of pins *j' j'* and adjustable positions of the fork *h h* being made to correspond therewith. The pins *j' j'* in those rows on wheel W which correspond with intervals having an odd number of beats should be arranged alternately on opposite sides. A shaft X^7, turning in the brackets Q Q, carries a segment X^6, from which project radially the pins X^7, Fig. 9. At X^{10}, in the longer arm of the lever X^{11}, is pivoted a Y-shaped link X^9, and of the ends which form its fork one has a closed slot for the passage of the upper pin X^7 and the other a similar slot left open at its outer end for the lower pin X^7. The upper slot is shown clearly in Fig. 2. The parts are usually in the position shown in Figs. 1, 2, 9, and 12, and as a consequence thereof if the toothed arm of lever X^{11} be moved inward from the frame-board the segment X^6 and shaft X^7 are pushed round by the lower pin X^7, which rests at the inner end of the open slot, and if the toothed arm be moved outward toward the frame-board A the segment and shaft are pulled round by the upper pin X^7, resting at the outer end of the closed slot shown in Fig. 2.

The shaft X^6 is always rotated in the same direction to whichever side the toothed arm may swing from its normal central position. A link X^5 connects a pin X^{28} in the side of the segment X^6 with a time-lever X, as is shown in Figs. 1, 9, and 12. This lever X is pivoted on the rod R^3, and its weight being transmitted to the lever X^{11} through the Y-shaped link X^9 serves to return that lever to its central position after a sidewise oscillation. This sidewise movement will be presently referred to again and its cause shown.

Instead of linking the lever X^{11} directly with the segment X^6, as already explained, the construction shown in Figs. 15 and 16 may be adopted without departing from the nature of my invention. In these figures the lever X^{11} is connected with a loose stud in another lever X^{29} by a wire link X^{24}, similar to the link W^4 joining the arm W^4 with the lever *n*. The wire is passed through stud X^{26} and is then bent, as shown in Fig. 15, so that its ends may be sprung into holes made in opposite sides of the stud X^{10}. The lever X^9 has a sleeve or boss at its lower end, through which passes a screw X^{23}, serving to pivot it on the train-bearing bracket Q. The tappets X^{27}, bent up from the edges of the lever, replace the slots formed in the link X^9 already described, but have precisely the same function and effect in rotating the segment and shaft by the pins X^7, which in this case project sidewise instead of radially therefrom. The pin X^{28} is to carry the link X^5, as in Figs. 9 and 12. The lever X^9 is slotted at X^{30} for the passage of the shaft X^6. By looking at Fig. 9 it will be observed that the weight of lever X, acting through the link X^5 and pins X^7, has a tendency to throw the single end of link X^9 upward, thus deflecting the toothed arm of lever X^{11} in the same direction. This deflection is only material in so far as it slightly increases the friction at the points of connection between levers X^{11} and *n*. By adopting the construction shown in Figs. 15 and 16 this deflection is avoided, but a little is lost in simplicity. However, when it is desired to place the shaft X^6 so far above or below the level of lever X^{11} that such a link as X^9 cannot be easily used the intermediate lever X^{29} may replace the link X^9 with advantage. The link X^{24} or link X^9, as the case may be, is of such length relative to the radius of arm *n'* that no material sidewise deflection of the toothed segment X^{12} occurs as a consequence of the endlong reciprocation of the lever X^{11} as the ordinary time-beats are being made.

The free end of the time-lever X extends below the impression-roller S, as shown most clearly in Fig. 9, and carries on each side type-segments X^3, bearing type-figures, of which some are shown in Fig. 2. The type-segments are pivoted on a rivet X^2 and are connected, as shown in Fig. 9, by light link-bars X^4 with corresponding levers X^{15} and X^{16}, which levers are pivoted on a screw X^{18}, projecting from the neighboring train-bearing bracket Q. Springs X^{17} hold the upper ends of the levers in contact with the edges of two related slides (marked *r* and *s*) lying in a groove A', formed in the middle part of the frame-board A. At q^3, Fig. 2, in dotted lines, are shown the stepped edges of these slides, which actuate the levers X^{15} and X^{16} to set the time-fractions. From the slide *r* a tongue *r'* is turned upward, and from the slide *s* a similar tongue *s'* is turned downward, as shown in Figs. 9 and 12. These tongues *r'* and *s'* form indices which show upon the corresponding scales *t* and *u* the lateral position of the slides. Notches A^1 A^2, Fig. 9, are cut through the frame-board A behind the scales *t* and *u* to allow of the slides *r* and *s* being inserted in the groove A' after the index-tongues *r'* and *s'* have been formed on them. The slides are first inserted in the groove and the scales afterward slipped behind the indices and fastened by the screws, as shown in Fig. 12.

The numerals upon each scale agree with the type-figures upon a related one of the type-segments X^3, and these figures represent in one case the denominators and in the other the numerators of the time-fractions commonly seen at the beginning of the staff in music. The slide *r*, which, acting upon the lever X^{15}, adjusts the numerator type-segment, carries the stepped edge *q*. Upon this edge is supported the tongue *l'*, forming part of the fork-adjusting slide *l*, which slide *l* is kept from turning on the rod *m* by the entry of its

tongue l' into the vertical groove A^2 provided for that purpose in the frame-board A, Fig. 3. The steps on the edge q are so regulated that when the tongue l' rests on one of them the pins $j\,j$ in the fork $h\,h$ are brought opposite a corresponding row of pins $j'\,j'$ on the wheel W. The slide s, which, acting on the lever X^{16}, adjusts the denominator type-segment, also carries an edge q', Figs. 2 and 3, having as many inclines thereon as there are numbers on the corresponding scale u. Against the edge q' rests the end b^3 of the lever b, under impulse from a spring c, attached at one end to a hook fixed in the plate e, Figs. 2 and 12. The lever b^3 is carried by a rod $\bar{a}$, turning in the post f and screw v, being mounted similarly to the rod m. The spring c may be replaced by a helical spring coiled on the rod b if it be desired to make room for a greater spread of the governing-fly than that shown herein. Each of the inclines on the edge q' is at such an angle that as the end b^3 rides along it the fork of the lever b moves the stop-sleeve a through a certain range, which may be the whole or only a part of its whole range of lateral movement on the spindle U'.

The inclines on q' are opposed to each other in order to avoid having a considerable jump in passing from one to another. A ratchet-wheel Y is mounted loosely upon the journal S^{11} of the impression-roller S; but its rotary movement relative thereto is limited by a pin Y', which is fixed in the wheel W^2 and projects through the curved slot shown in Fig. 11, the pin Y' forming both a back and front stop. Upon the boss of the ratchet-wheel is mounted a weak spring Y^3, of which the free tongue presses against the pin Y', and thus gives the ratchet Y a tendency to turn forward in the same direction as that in which the impression-roller usually rotates.

Y^4 is a detent so mounted on a screw Y^4 (shown in section in Fig. 11) as to engage the ratchet-teeth and connected by a notch in the end of a rigidly-attached arm Y^5 with a rod Y^6, as shown in Figs. 2 and 11. The rod Y^6 lies across the upper edges of the marking-levers R and forms with the ends Y^7 Y^7 a universal bail turning on the rod R^3.

Owing to the detent Y^4 engaging the ratchet-wheel Y the motor-train and connected parts are at rest until a key E or F is struck and is followed downward by a contact-lever P under the influence of spring O^3, bent round its fulcrum-screw O^2. This movement is transmitted along the cord or wire R^5 to the corresponding marking-lever R, which in carrying its attached marking-disk R' from the inking-roller S^3 against the paper S^4 on the impression-roller S raises the bail-rod Y^6 and detent-arm Y^5, thus removing the detent Y^4 from the teeth of ratchet-wheel Y.

When the depressed key E or F rises and the connected marking-lever R returns to its normal position, the detent Y^4 again enters the teeth of wheel Y; but as that wheel has been in the meantime thrown forward on the journal S^{11} by the spring Y^3 the motion of the train is not at once arrested, but continues until the pin Y' arrives again at the forward end of the curved slot in the already-stopped ratchet-wheel Y. This interval between the return of a note E or F and the total stoppage of the motor-train and connected parts bridges any ordinary complete pause likely to occur in music and prevents waste of paper. Such pauses or the more common rests are indicated on the paper band by the appearance of a pronounced interval between the end of one and the beginning of the following note-mark.

Referring to the torn record in Fig. 2, the positions of the note-marks upon the staff approximate to those of the same notes as usually written, note-marks made by white keys appearing upon or midway between staff-line sand those resulting from movement of black keys immediately above or below staff-lines—that is to say, slightly above or below the note-marks made by white keys, of which they are the sharps or flats, as the case may be. This result is secured on a staff having lines uniformly far apart by arranging the marking-levers connected with white keys at equal distances apart in the comb R^4, even though the corresponding notes differ in pitch by a half-tone only, as in the case of E and F, B and C. This arrangement is apparent in Figs. 1 and 2. The duration of a note is indicated by the comparative length of the related line marked upon the paper band, and in order to facilitate comparison of one mark with another in respect of length when copying the record vertical lines are printed or ruled across the paper at equal intervals, as shown in Fig. 2, before the band is made into a roll. While music is being played the metronome-arm V beats at a rate dependent upon the speed at which the fly U has been set by movement of the denominator-slide s, and the figure in printing position on the connected type-segment X^2 will be that of the division on scale u, in which the indicator-point s' rests. The number of beats to the measure is fixed by the position of the numerator-slide r, which acts upon the slide l and oscillating fork $h\,h$, and also through the lever X^{15} and link-bar X^4 sets the related type-segment so that the figure in printing position thereon agrees with the number of the division on scale t, in which the index-point r' rests. When the metronome-arm V is finishing the last of the beats allotted to a measure, a pin j' on the wheel W arrives in the path of one of the pins $j\,j$, carried by the oscillating fork $h\,h$, and arrests its movement, which movement results from the passage of the pin g upward through the slotted arm X^{13} of the toothed lever X^{11}. The slotted arm X^{13} being thus also arrested, while motion still continues in the reciprocating lever n, the toothed arm of lever X^{11} is necessarily swung to one side, which movement causes the toothed segment X^{12}, acting upon the pinion V^5, to give the metronome-arm V^4

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half-turn to indicate that a measure is complete.

When a pin j is stopped by a pin j', their ends should preferably remain in contact during a full half-turn and return of the arm V. This result can be secured by making the sizes of the pins j' j' proportional to their relative distances from the axis of wheel W. The said sidewise movement of the lever X^{11} at the same time, through the Y-shaped link X^3, pulls or pushes the shaft X^2 round, thus causing the link X^5 and time-lever X to raise the type-segments so that the set time fraction is printed on the paper margin, as shown in Fig. 2, the mark dividing the two figures being made by the point X', forming part of the time-lever x. This time fraction on the paper margin thus shows the contents of a measure and also indicates the place of the dividing-bar.

The type-figures are inked in the following manner: A lever of the form shown at X^{19} in Fig. 9 turns upon the pivot X^2 of the type-segments and has a notch S^{13}, through which passes in this case the pivot of the inking-roller S^3, but a pin fixed in the neighboring bracket Q may be employed instead. On one side of the lever X^{19}, at its upper end, are mounted a pin X^{21} and a small inking-roller X^{22}, around which pin and roller passes an endless tape X^{20}. This tape conveys ink from the roller X^{22} to the type in printing position, normally making contact therewith near the pin X^{21}; but when the time-lever rises at the end of a measure the arm X^{19}, turning upon the pivots X^2 and S^{13}, is thrown backward out of the path of the rising type-segments X^3. Friction between the face of the type and the endless tape tends to give the latter a slow movement round the pin and roller, so that a fresh inking-surface is being constantly presented to the type. In order to secure a clear impression of the time fraction on the margin of the paper band, the type-surface is allowed to move with the paper during the short time they are in contact.

The link X^4 is connected with the related segment X^3 by a pin in the latter, which passes through an elliptical slot in the former, thus making a somewhat loose connection between them, as is shown in Fig. 9. When the inking-arm X^{19} is thrown outward, owing to upward movement of the time-arm X, the friction of the inking-tape X^{20} tilts each type-segment until the fixed pin therein rests at the outer end of the elliptical slot through which it passes. Upon bringing the type against the paper band S^4 the segment X^3 is carried backward in contact therewith, the fixed connecting-pin moving toward the inner end of the elliptical slot in the link-bar X^4. The type-segments X^3 may be dispensed with and a mark made by the point X' of the lever X used to show the place of the bar alone, or a pair of levers may be used to make a mark on each margin, and in this case the denominator-segment may be attached to one and the numerator-segment to the other, so that a figure may be printed on each margin of the band S^4. The sections of scale u may be divided, if desired, so that the motor-train may be at once set approximately at a predetermined rate of speed, so that the arm V may make a particular number of beats to each minute.

I preferably make the metronome-arm V with sides differing in color, as in Figs. 1 and 12, so as to show more distinctly the turn which marks the end of a measure. In Figs. 13 and 14 are shown the means employed to secure audible time-beats in conjunction with the beating-arm V or otherwise. In Fig. 13 is shown two bells Z Z, mounted at the ends of the hanging strips Z' Z', so that their positions may be adjustable relative to the corresponding hammers Z^8 Z^8 on the hanging arms Z^7 Z^7, united with the arms Z^6 Z^6 by the bosses or sleeves Z^5 Z^5, through which pivot-screws pass into the frame-board A. Through each arm Z^6 passes a pin or rivet on which turn the trips Z^4, bent up from sheet metal, as shown in Figs. 13 and 14. The pin V' in Fig. 13 projects on one side only and as the rod V^2 moves back and forth comes in contact with one of the trips, tilting it up on its pivot Z^5 in the arm Z^6 until the edge of the bend Z^9 strikes the edge of that arm.

As the rod V^2 continues its movement, the trip-point Z^{10} rides across the pin V', carrying the arm Z^6 up, thus raising the bell-hammer Z^8. Near the end of sidewise movement in rod V^2 the trip slips over the pin V', allowing the hammer to fall and sound the bell. When the lever X^{11} is deflected at the end of a measure and the rod V^2 is rotated by the toothed segment X^{12}, acting on the pinion V^3, the pin V' is carried round and acts in the manner just described upon the trip connected with the other hammer, causing that closing beat to be struck upon the fellow bell, which I make of a distinctive tone.

In Fig. 14 the pin V' is shown projecting on both sides of the rod V^2 and the beats are all made on a single bell. That end of the pin V' which turns to cause the closing beat should be slightly farther projected than the other, so as to be sure and catch the trip from its central position. The side to which the pin V' normally projects in the two-bell construction of Fig. 13 and the side on which the bell-trip is placed in the one-bell plan of Fig. 14 should be such that when the last beat of a measure is being produced, at the time of its contact with the hammer-trip, the movement due to the rotation and that due to the tilting of rod V^2 may both be carrying the effective part of pin V' in the same direction.

In Fig. 17 is shown a somewhat different arrangement in relative position of the paper-roll, ruling-roller, and impression-roller, by which the roller S' and the clipping-rollers S^6 may be dispensed with.

It will be observed that the ruling-roller is inked by a separate inking-roller S^3 and that

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the disk-inking roller S^6 is rotated by a toothed wheel gearing with the pinion T^1 on shaft T^2, as shown in dotted lines. The paper after passing partially round the impression-roller S is allowed to rest on the paper-roll, being thus conveniently carried away. Paper-guides, such as S^{10}, take the place of the ones shown at S^9 in Figs. 1, 2, 8, and 9.

The height of the piano front D will to a great extent decide whether the arrangement of Fig. 8 or that of Fig. 17 is the better one in any particular case. If necessary, the recording mechanism may be put at one end of the frame-board instead of in the middle, and the height may be reduced, if so desired, by placing two or more of the pulleys R^6 on the same pivot-pin. The train-bearing bracket Q is cut away at Q^3, Figs. 3 and 12, for the passage of the slides, the forked link, the lever X^{11}, and the rod Y^6.

I declare that what I claim is—

1. In a music recorder, the combination with a vertical frame-board carrying the recording mechanism, of two pairs of spring arms pivotally connected to the frame-board, one pair at each end thereof, the free ends of each pair carrying a padded sole-piece between them adapted to bear against the cheeks of the musical instrument under the spring pressure of said arms, and to be clamped at a suitable angle relatively to said arms, substantially as and for the purpose set forth.

2. In a music recorder, a clamping device comprising a pair of arms G rigidly connected together at one end by a rod N turning in angle plates attached to the frame-board, a spring L coiled on said rod and tending to throw said arms outward, a padded sole-piece H carried between said arms by a bolt J passing through the free ends of the latter and through perforated lugs on said sole-piece, and a thumb-lever K screwed on the threaded end of said bolt, in combination, for the purpose set forth.

3. In a music recorder, the combination with a series of marking devices, and the keys; of a series of elbow levers pivoted above the keys in direct contact therewith and movable in a plane at right angles to said keys; and connections between the marking devices and the respective levers.

4. In a music recorder, a series of pivoted contact levers movable in a plane at right angles to the keys of the musical instrument, and adapted to follow the said keys downward under spring impulsion when the keys are depressed by the performer for the purpose set forth.

5. In a music recorder, a series of hangers secured to the frame by means of binding screws and capable of being deflected to and fixed at the desired angle, in combination with a series of contact levers turning on fulcrum screws attached to the lower ends of said hangers, said contact levers bearing against the keys of the musical instrument under spring pressure, substantially as and for the purpose set forth.

6. In a music recorder, a series of pivoted levers, each having an arm in contact with the keys of the musical instrument, a series of wrest-pins attached to said levers, and a series of cords or flexible wires each having one end secured to said wrest-pins and their other ends secured to a series of marking levers, in combination, for the purpose set forth.

7. In a music recorder, a series of pivoted levers each having an arm in contact with the keys of the musical instrument and adapted to follow the said keys downward under spring impulsion when the keys are depressed by the performer, a series of wrest-pins attached to said levers, and a series of cords or flexible wires secured to said wrest-pins and to a series of marking levers, in combination for the purpose set forth.

8. In a music recorder, a series of deflectable hangers secured to the frame, a series of contact levers turning on fulcrum screws attached to said hangers and bearing against and adapted to follow the movements of the keys of the musical instrument, a series of wrest-pins carried by said contact levers, cords or flexible wires secured to said wrest-pins and to a series of marking levers, and means for guiding said cords or wires, in combination, substantially as and for the purpose set forth.

9. In a music recorder, the combination with a series of cords or flexible wires connecting the contact levers with the marking levers, of a series of grooved pulleys guiding the said cords or wires, and arranged closely together with the object of preventing the cords or wires from slipping out of their proper grooves, substantially as set forth.

10. In a music recorder, a series of pivoted marking levers made in two sets, and having means for actuating them attached at a distance from their center of oscillation different in one set to that in the other set, said levers being arranged side by side alternately from each set, substantially as and for the purpose set forth.

11. In a music recorder, the combination with the comb R^4; of the rod R^2 lying in notches R^3 in said comb; marking levers R pivoted on said rod between the teeth of the comb; marking disks R′ carried by said levers; and means for actuating the levers.

12. In a music recorder, a fly having its vanes formed of two or more ribbons wound upon each other substantially as and for the purpose set forth.

13. In a music recorder, a fly having its vane or vanes formed of a ribbon or ribbons wound upon itself or upon each other and adapted to be spread or extended by the action of air resistance, substantially as and for the purpose set forth.

14. In a music recorder a fly having its vane or vanes formed of a ribbon or ribbons

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wound upon itself or upon each other and adapted to be spread or extended by the pull of centrifugal force, substantially as and for the purpose set forth.

15. In a music recorder, a fly having its vane or vanes formed of a ribbon or ribbons wound upon itself or upon each other within a casing and having its end or ends protruding through a slit or slits in said casing and supported by projecting wires, substantially as and for the purpose set forth.

16. In a music recorder, a fly having its vane or vanes formed of a ribbon or ribbons wound within a casing by means of spring impulsion, substantially as and for the purpose set forth.

17. In a music recorder, a fly having its vane or vanes arranged at a minimum spread when motion begins, but adapted to increase such spread to the desired limit as the desired speed is attained, whereby the motor train is enabled to readily overcome the inertia of the moving parts and to more quickly rise to the desired speed, substantially as set forth.

18. In a music recorder, a fly comprising a spindle formed with a longitudinal groove, a hollow roller mounted on said spindle and having a stud engaging in said groove, said roller being free to move only longitudinally on said spindle, a cylindrical case mounted and turning on said spindle and inclosing said roller, and formed with longitudinal slits, one end of said case being provided with crown ratchet teeth, and having a thread cut within its other end adapted to engage with a helical thread formed on the corresponding end of the spindle, a helical spring within the roller and surrounding the spindle and tending to turn the case relatively to the roller in the same direction as that in which the fly normally rotates, ribbons attached to said roller and wound thereon and upon each other within the case under the impulse of said spring and having their ends protruding through the slits in said case, wires projecting from the case and supporting the ribbon ends, the latter being free to slide thereon, and a stop sleeve adjustable on the spindle and held against rotation thereon by a stud engaging in the groove in the latter, said sleeve having teeth opposed to and adapted to engage the teeth of the crown ratchet end of the case when the fly attains the desired speed, in combination substantially as and for the purpose set forth.

19. In a music recorder, the combination with a fly having its vane or vanes automatically extended or increased in spread when the fly rotates, of a stop sleeve adjustable on and rotating with the spindle of the fly and adapted to limit the spread of the vanes, a pivoted lever engaging with and adapted to adjust said stop sleeve longitudinally on the spindle, and means for operating said lever, substantially as and for the purpose set forth.

20. In a music recorder, the combination with a fly having its vane or vanes automatically extended or increased in spread when the fly rotates, of an annularly grooved stop sleeve a, a pivoted lever b, and a slide s carrying a tongue as an index in front of a scale, said lever having one arm forked to engage with the groove of said sleeve, and its other arm bearing under spring impulsion against a stepped edge q' formed on said slide, substantially as and for the purpose set forth.

21. In a music recorder, the combination with a motor train, of a metronome arm adapted to beat time under the impulse of said train, and means for automatically rotating said arm upon its own axis for the purpose of emphasizing certain time intervals, substantially as set forth.

22. In a music recorder, the combination with a motor train, of a metronome arm adapted to beat time under the impulse of said motor train, said arm having its sides differently colored, and means for rotating said arm upon its own axis substantially as and for the purpose set forth.

23. In a music recorder, the combination with a motor train, of a pivoted rod m carrying a lever n rigidly fixed thereto and receiving an oscillating movement from the motor train by means of a link pivotally attached to said lever and to a crank arm on a spindle of said train, an arm n' on said lever carrying a screw, a collar loosely screwed on said screw, a link V^7 having one end forked and pivotally connected to said collar, and its other end pivotally connected to a carrier V^3 swinging upon a screw or pin fixed to the frame, and a vertical rod V^2 carried by the said carrier and bearing a metronome arm, substantially as and for the purpose set forth.

24. In a music recorder, the combination with a motor train, of a carrier swinging upon a screw or pin fixed to the frame, means for oscillating said carrier from the motor train, a vertical rod carried by said carrier and oscillating therewith, and a metronome arm of light and thin material hinged to said rod, substantially as and for the purpose set forth.

25. In a music recorder, a motor train having a wheel W provided with several concentric rows of pins j' projecting from its sides, a pivoted rod m carrying a lever n rigidly fixed thereto, means for imparting an oscillating movement from the motor train to said rod and lever, a carrier V^4 swinging upon a screw or pin fixed to the frame and oscillated synchronously with the lever n by means of a link connection between said carrier and an arm n' of said lever n, a metronome arm supported on a vertical rod V^2 carried by the said carrier, said rod being free to turn on its own axis therein, a pinion V^5 fixed on said vertical rod, a lever X^{11} pivotally connected with the arm n' of the lever n and having its free end formed as a toothed segment X^{12} adapted to engage the pinion V^5, a shorter arm on the lever X^{11} slotted to clear the rod m when in motion and having a notch X^{13} at its outer end, a slide k mounted freely upon the rod m,

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an oscillating fork h integral with and projecting from the said slide, said fork being adapted to receive within it the edge of the wheel W and bearing pins $j\,j$ adapted to engage the pins j' of the said wheel W, a rod q fixed to and rising from said oscillating fork and engaging in the notch X^{13} formed in the shorter arm of the lever X^{11}, a slide l mounted on the rod m but held against rotation thereon and supporting the slide k, and a slide r supported in the frame and having a stepped edge q on which bears a projection l' formed on the slide l, the said slide r carrying a tongue as an index in front of a scale; in combination, substantially as and for the purpose set forth.

26. In a music recorder, the combination with a motor train, means for governing and adjusting the speed of said train, a metronome arm oscillated by the motor train, a lever X^{11} having a toothed segment engaging with a pinion on the metronome rod, means for oscillating said lever at predetermined intervals so as to turn the metronome arm on its own axis, and means for adjusting the length of said intervals; of a shaft X^9 turning in suitable supports and carrying a segment X^6 having pins X^7 projecting radially therefrom, a Y-shaped link X^9 pivoted to the lever X^{11} and having the ends which form its fork provided the one with a closed and the other with an open slot adapted to receive the said pins X^7, a pivoted time lever X, a link X^5 pivotally connected at one end to the segment X^6 and having its other end engaging a pin on the time lever, a pair of type segments X^3 pivotally connected to said time lever, means for inking said type segments, slides r and s, supported in the frame, levers X^{15} and X^{16} pivoted on a suitable support and having their free ends bearing under spring impulsion against stepped edges q^2 formed on the slides r and s, and light link bars X^4 pivoted at one end to the levers X^{15} and X^{16} and having their other ends formed with elliptical slots in which engage pins fixed to the type segments, substantially as and for the purpose set forth.

27. In a music recorder, the combination with a motor train, mechanism for governing the speed of said train, a metronome arm oscillated by the motor train, mechanism for emphasizing certain time beats of the metronome arm, and mechanism for printing the time fractions; of two slides r and s supported in the frame board and having stepped edges $q\,q'\,q^3$ adapted to adjust the speed governing mechanism of the motor train the emphasizing mechanism of the metronome arm and the mechanism for printing the time fractions, and having tongues standing as indices in front of fixed scales indicating respectively the numerators and the denominators of the time fractions, substantially as set forth.

28. In a music recorder, the combination with a motor train, an impression roller rotated thereby, a series of marking levers pivoted to a rod R^2, and means for operating said marking levers; of a ratchet wheel Y mounted loosely on the journal of the impression roller and free to move backward and forward between stops relatively to the wheel W^2 of the motor train, said ratchet having a tendency under spring impulsion to turn forward in the same direction as that in which the impression roller usually rotates, a detent Y^3 engaging said ratchet, and an arm Y^5 rigidly connected to said detent and having its free end notched to engage with a bail rod Y^4 lying across the upper edges of the marking levers, the rod Y^6 being carried by arms Y^7 at its ends turning on the rod R^2, substantially as and for the purpose set forth.

29. In a music recorder, the combination with a pair of type segments and means for operating them, of a lever X^{19} turning on the pivot X^2 of the type segments and having a notch S^{13} engaging with a suitably fixed pivot said lever carrying at its upper end a pin X^8 and a small inking roller X^{21} and an endless tape X^{20} passing round said pin and roller, substantially as and for the purpose set forth.

30. In a music recorder, the combination with the metronome; of a device for marking time-fractions; and intermediate connections, whereby the time-fraction to be printed is varied to correspond to the beat of the metronome.

31. In a music recorder, the combination with a metronome, and a device for printing time-fractions; of connections between said device and the metronome; a motor; and means for adjusting the motor to vary the beat of the metronome and the time to be printed.

32. In a music recorder, the combination with a series of marking devices operated by the white keys; of a series of marking devices operated by the black keys; one set or series of marking devices being spaced differently from those of the other set, whereby the notes represented by the two sets of keys may be determined without the use of a special staff.

33. In a music recorder, the combination with a bell adapted to beat time audibly, a bell having a distinctive tone adapted to be sounded to emphasize certain beats, of means for printing note-marks, substantially as set forth.

34. In a music recorder, the combination with a motor train, a rod V^2 oscillated by said train and means for turning the said rod on its own axis at predetermined intervals; of the two bells Z having distinctive tones and mounted on deflectable hangers suitably supported, hanging arms Z^2 pivoted to the frame and carrying hammers Z^3 adapted to strike the said bells, arms Z^6 rigidly attached to the hanging arms near their pivots, trips Z^4 pivoted on the free ends of the arms Z^6 and a pin V' carried by the oscillating rod V^2 and adapted to engage with one of said trips in order to sound one of the bells as the said rod oscillates, and to engage with the other of

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said trips when the rod turns on its own axis, in order to sound the other bell, substantially as and for the purpose set forth.

35. A music recorder comprising a vertical frame-board adapted to stand edgewise on the keyblocks of a pianoforte or similarly keyed musical instrument, means for clamping same in such position, a series of pivoted marking levers, means for actuating said marking levers when the keys of the musical instrument are depressed, a motor train, means for governing and adjusting the speed of said train, means for automatically beating time visibly and audibly under the impulse of said motor train, a roll of paper adapted to receive printed impressions, means for feeding guiding and ruling said paper an impression roller, an inking roller, means for controlling and adjusting the duration of the time measures and the number of beats to a measure, and means for indicating the time fractions and for printing said fractions on the paper band, in combination substantially as hereinbefore described and illustrated in the accompanying drawings.

36. A music recorder having its marking levers arranged in groups,—said groups being divided by intervals which correspond to those points on the keyboard where two white keys are not separated by a black,—whereby said levers when actuated shall print on a paper band having an ordinary staff the white-key note-marks in the center of the spaces or directly on the lines of the staff, and the black-key note-marks appreciably above or below their respective staff lines, thereby avoiding the use of a special staff with unequally spaced lines.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN LOUIS CANTELO.

Witnesses:
JOSEPH J. ROYDEN,
H. P. SHOOBRIDGE.

TO CLOSE IN CENTER

Nos. 110 & 111.

W. S. M. P. Co. v. A. Co

(No Model.)

C. CLEMENTS-KROPP.

MUSICAL NOTATION.

No. 129,841. Patented June 10, 1890.

Fig. 1.

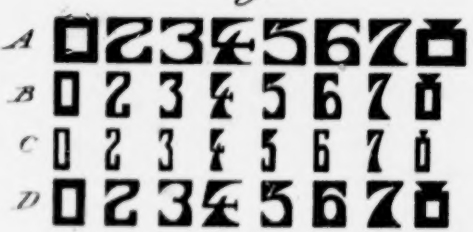


Fig. 2.

Fig. 3.

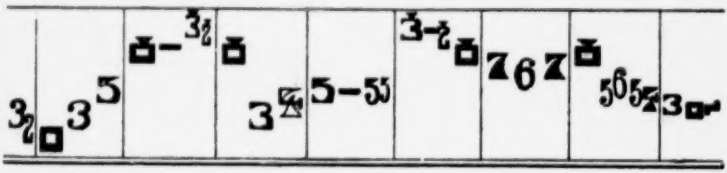


Fig. 4.

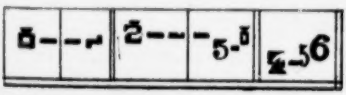
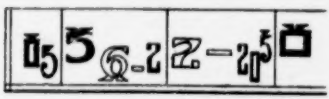


Fig. 5.



Witnesses:

R. H. McDonald Jr.

Inventor:

Chas. Clements Kropp Jr.

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UNITED STATES PATENT OFFICE.

CHARLES CLEMENTS-KROPP, OF SAN FRANCISCO, CALIFORNIA.

MUSICAL NOTATION.

SPECIFICATION forming part of Letters Patent No. 429,841, dated June 10, 1890.

Application filed December 11, 1888. Serial No. 293,316. (No model.)

To all whom it may concern:

Be it known that I, CHARLES CLEMENTS-KROPP, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Figural or Numeral Notation for Musical Melody and Accompaniment, of which the following is a specification.

My invention relates to an improved indication for the duration of tone, the pitch and position of scales and intervals, and a controllable guiding-indicator.

The object of my invention is to write and print a more perfect and less complicated notation than heretofore used by introducing and using newly-invented indications for such important elements in music, which have never before received a directly visible indication within any notation known to me.

In music the duration of a tone or tones is governed by the prescribed tempo and the single beat of the baton or metronome, and in reading or playing music it is of great importance to see a distinct or separate indication for each single beat within each single measure for the purpose of seeing directly the number of tones or the single tone to be played within the duration of one beat.

In my new notation I introduce and use the indication for a single beat by means of equal and conspicuous dimensions for the height and width of one or more characters or figures having or showing the full duration of one beat. Each beat is indicated by means of a space between each character representing one beat and the preceding one, as shown in Figure 1, letter A, also in Figs. 3, 4, and 5, wherein the dimensions of characters representing each a single beat, and their separate positions within each measure, are indicated or shown, Fig. 2 being a representation of the figures of my notation arranged in a scale of several octaves.

For indicating the full duration of a tone within one beat I use the equal dimensions of height and width for each figure or character to be sounded during the full time required for a regularly-prescribed and full beat, in the same manner as shown in Fig. 1, letter A.

Partial duration of tone or tones requiring only a certain part of or within the time of one beat is indicated by means of different dimensions for the width of the character or figure used and being in comparative proportion with the fixed height of the same and with the required part of duration within the prescribed time of one beat.

In Fig. 1, letter B, the dimension for the width of the character or figures, when compared with the fixed height of the same, is showing only a comparative or proportional half of the dimension used for the fixed height, thereby indicating a proportional half duration of tone within one beat. Two such figures indicate one beat and the full duration thereof, letter C showing character and figures having only a proportional width of one-fourth of the fixed height, thereby indicating a one-fourth duration of one beat. Four of such figures indicate one beat, letter D showing character and figures having a proportional width of three-fourths of the fixed height, thereby indicating a proportional duration of tone within one beat. In same manner the triplets and other partial durations within one single beat are indicated by means of a comparative and proportionate width for each figure or character in connection with a fixed height of the same.

For the missing numeral 1 in Fig. 1 I have substituted the character of a perfect square, because it is more suitable and conspicuous for indicating the fixed height for all other figures or characters used and for indicating the tonica of a prescribed scale.

For indicating the extended duration of a tone or tones to be sounded without interruption during the time of more than one beat or any required part thereof I use in my new notation a horizontal line or dash, following immediately the figure or character used for indicating the tone to be extended, and running or extenting across exactly the same space within the notation as the dimension for the width of the preceding figure should occupy when indicating the corresponding

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duration for and within each additional beat or part thereof, drawing Fig. 4 showing three examples for the indication of extended tones, and for comparison I write below the same extension of tones as written in the note system.

The note system uses the forms of the notes (♩ ♩ ♪) and especial signatures, (the tie, dot, and double dot, ⌒ · ··) for the purpose of indicating extended tones, in their theory of duration, but not directly visible to the eye for and within each single beat or part thereof, like my indication does.

My new notation for duration does not require especial names like those used in the note system, as they are known as quickly as seen, and a name would be a hinderance.

Believing that I have fully described my invention, what I desire to claim and secure by Letters Patent is—

A system of musical notation consisting of notes or characters the dimensions of which indicate their value as to duration of time, a note of the value in time of one beat to or within a measure being of equal height and width, the other notes being of greater or less value having the same height, but having proportionately greater or less width, all substantially as described and shown.

CHARLES CLEMENTS-KROPP.

Witnesses:
M. H. SAVAGE,
R. H. MCDONALD, JR.

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(No Model.)

D. FALLON.

METHOD OF MUSICAL NOTATION.

No. 391,887. Patented Oct. 30, 1888.

Fig. 1.

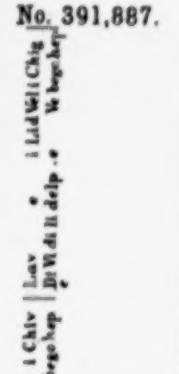

Fig. 3.

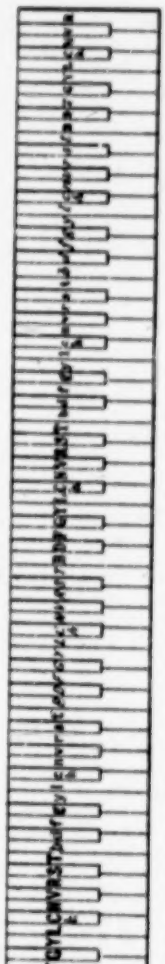

Fig. 2.

WITNESSES:
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INVENTOR:
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BY Munn & Co
ATTORNEYS.

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UNITED STATES PATENT OFFICE.

DIEGO FALLON, OF BOGOTA, CUNDINAMARCA, UNITED STATES OF COLOMBIA.

METHOD OF MUSICAL NOTATION.

SPECIFICATION forming part of Letters Patent No. 391,887, dated October 30, 1888.

Application filed November 17, 1887. Serial No. 255,494. (No model.) Patented in the Republic of Colombia August 9, 1881, and in England October 4, 1886, No. 12,609.

To all whom it may concern:

Be it known that I, DIEGO FALLON, of Bogota, in the State of Cundinamarca, and the United States of Colombia, South America, have invented a new and improved Musical Notation, (for which I have obtained a patent in England, No. 12,609, dated October 4, 1886, and in the Republic of Colombia, dated August 9, 1881,) of which the following is a full, clear, and exact description.

My invention relates to a new and improved musical notation; and it has for its object to express the sounds of music in writing without the use of notes, clefs, keys, staffs, flats, or sharps, and to enable the beginner to learn quickly and to transpose a piece of music instantly from one key to another.

The method consists of designating the sounds of music by consonants and of representing the value and duration of the sounds by vowels.

The invention also consists of details hereinafter more fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a piece of music as written according to my improved method. Fig. 2 is the same piece of music as written according to the old style of music, and Fig. 3 is a plan view of the key board of a piano, with the keys named according to my improved method.

In my improved method I make use of the natural law of human speech and its representation in writing by means of alphabetical characters or letters. In this law of the human speech the consonants represent the organ of speech and the articulate sounds, while the vowels represent the voice sounds and give life and sound to the consonants.

In my improved method the consonants are the denominating sounds of the notes, dots, and rests, while the vowels designate the life of the consonants—that is, the duration or value of the sound or note. The twelve chromatic sounds of an octave are represented by the twelve consonants H, D, F, G, Y, L, Ch, N, V, R, S, and T, in the order given, and the consonants Y, Ch, and V have also synonyms, which are as follows: Y equals J, Ch equals Sh, and V equals P. It will be seen that each of these twelve consonants or notes, which are ascending in chromatic succession from C-natural, inclusive, to B-natural, inclusive, has an unalterable, exclusive, and untransferable name.

The twelve consonants of one octave are printed in one form of type, and the several octaves are distinguished from each other by using the different style of type for the consonants of each octave, so that the same consonant representing a certain note or sound in all the different octaves is distinguished by its different style of type, as illustrated in Fig. 3. It will thus be seen that the different degrees of pitch in which one and the same consonant or note may be reproduced along the whole range of musical sounds are represented by the different styles of type in which the consonants are printed. The vowels with which the consonants are pronounced indicate the respective durations or values of the sounds of the consonants or notes, and the vowels uo ui a e i o u indicate correspondingly full notes, half-notes, quarter-notes, eighth-notes, sixteenth-notes, &c. The first two vowels, uo and ui, may also be written ô, û, respectively. The dots are expressed in two ways—absolute and relative. The relative dots are indicated by ui, a, e, i, o, and u, and have a relative value to each other in the same manner as above described in relation to the duration of the sound. The general or absolute dots are represented by the consonants c and x. The letter c stands at the end of a note, chord, or rest, and represents a simple or single dot. The letter x is also an ending, but designates a double dot. These dots are called absolute or general, because their lengths remain the same whatever be the duration of the note, chord, or rest to which they are adjoined. Thus the letter c makes the duration longer by one-half of its original value and x by three-quarters, whereas if the duration a were to be augmented by one-

half of its value through a relative dot the vowel e must be added, because the value of e is one-half that of a. If the duration of e is to be increased in the same proportion, then the vowel i must be added, because the duration i is one-half of that of e, &c. The rests and pauses are represented by the letter h, which in this system stands for the general expression of silence. The duration or length of each rest depends on the vowel with which h is printed—thus huo, hui, ha, he, hi, ho, hu.

The application of the different alphabetical characters or letters in writing a piece of music is as follows: The respective alphabetical characters designating the respective sounds of music and their duration are written on a real or imaginary straight horizontal line from left to right. In music with an accompaniment the treble is written in one line and the bass is written in another line placed directly below the treble line and as near together as possible, but without running the different alphabetical characters of the different lines into each other. The consonants or notes receive their value or duration by writing the respective vowels alongside of the consonant. Thus, Ba indicates that the value of the note or sound B is one-fourth. Placing a vowel or combination of vowels upon a consonant signifies its absolute or longer duration when it belongs to two different themes at the same time. If the said note occurs in the bass in piano-forte or organ music, then the aforesaid vowel is placed underneath the note or consonant. The consonant that represents a note, or the several consonants which represent a chord are suppressed and the vowel that indicates its value is retained in place of such note or chord, so as to express a certain kind of tie used in common notation. Such a tie is employed between two notes or between two chords which are identical in form and pitch in order to indicate that the first of the two notes or the two chords is to be held and increased in duration by a quantity of time equal to the value of the second note or the second chord and is not played again, though actually written twice. This is the process employed in common notation.

Now, in my method, instead of writing the note or chord again and connecting it to the preceding one by one or more ties, I suppress the consonant character or characters that indicate the notes and also the tie or ties, and merely write the vowel that represents the duration to be added to the note or chord which is to be held. The following note—for instance, gi--is equivalent to E♩ with the duration of a semi-quaver. If it is to be increased in value one crotchet more, then it is expressed

gi a, and not gi ga. In like manner the chord gins will be increased by a crotchet by writing

it thus: gins a, instead of gins gans. In fact, the process of joining the notes by means of curved dashes, as employed in common notation, is not necessary in the system of my improved method. The use of a dot on the left of a vowel—thus, .uo .ui .a .e .i .o .u—indicates that the preceding note or chord is to be repeated with the value expressed by the vowel to the left of which the dot is marked. Thus the following passage Blar e .e .a .a is to be played as if it were written Blar e Bler Blar Blar. This kind of repetition may also be expressed by a capital vowel without a dot, so that the foregoing passage may be written Blar e E A A. The use of the comma on the right of a consonant—for instance, b,—indicates that the note represented by such a consonant should be retained until the corelative apostrophe (') is met with farther along the same line. This apostrophe may appear before the end of the bar or several bars distant from the comma. The latter may also be seen marked at the foot of the duration that accompanies the note—thus, ba,.

The different degrees of thickness and the different style of type in which the letters making the syllabic phrase are printed answer the purpose of indicating the amount of force with which a note or chord is to be played or sung. This device supplies the place of the italic letters *p pp ppp f ff fff* on convenient occasions.

The hyphen (-) between two or more notes or chords indicates that such notes or chords constitute a clause which is to be repeated. The number of repetitions is indicated by a numeral placed above the clause, and the value of the note that constitutes the clause by the vowel or diphthong placed upon the hyphen or to the right of each note or in the center of each chord. Thus the following passage 6 big-ni is to be played thus: big ni big ni big ni big ni big ni big ni. The abbreviation may also be written thus: 6 bg i n.

Vowels when employed as initials represent the different octaves of the key-board of a piano or organ in the following order, (from the bass to the treble:) uo u a e i o u, (French.) Thus the chord blir, which represents C-natural, F-natural, and A-natural with the value of a semi-quaver, as written in the seven octaves would be oublir, ublir, ablir, eblir, iblir, oblir, and ublir. The old Latin conjunction (&) indicates the repetition of the clause that precedes it.

Chords are written horizontally like common words—thus, Larbal nasbay. The chords are distinguished from melody by their ending, which is always a consonant, and likewise by having more consonants than vowels.

The first vowel of a chord is the only one that represents duration, while the other vowels in the same chord are merely euphonical. For instance, the value of baynsb is that of one crotchet, and if the same chord is written bayansb or bayanasb, then its value will remain that of one single crotchet.

The first consonant of a chord is the only one that corresponds to the peculiar form of type that indicates its relative place on the

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key-board. The remaining consonants of the same chord may be printed in small letters of the corresponding type to which the first consonant belongs.

The pause (⁀) is expressed by the common exclamation-mark (!).

It will be seen that no knowledge of keys is necessary, as each one of the twelve notes or consonants that make up the chromatic scale has its own exclusive separate name, and, as a consequence, any chord, whatever be the key to which it belongs, is only a simple combination of two, three, four, or, at the utmost, of five of the twelve consonants, and this combination of consonants becomes a fixed word, indicating the chord. It will also be seen that any successive series of single notes must consist of a group or number of the twelve consonants which never change, though the form of type and the vowels may constantly vary. Hence music written with my method is perceived by the sight and the mind of the reader as written in one single key, in one single clef, and without any sharps, flats, or naturals. The same piece of music written according to my method or to the notation now in use, when executed in both ways, sounds the same. No knowledge of clefs is necessary, as the ordinary staff is excluded and the notes of the bass and the treble do not intrude upon each other. No mistakes are made by the reader as regards the notes or consonants which should be played. From the very first lesson the beginner reads harmony correctly, however rich and full it may be, for the faculty of attention, being free from keys, clefs, and accidental sharps and flats, he can apply all his power to the simple task of deciphering groups of three, four, or five consonants of the invariable and limited character above mentioned. The identification of different forms of type, representing different degrees of pitch, is mastered with a few lessons. With the combination of consonants and vowels a musical language is written in which the words can be distinctly pronounced, each word or syllable conveying an idea regarding the performing of the music—that is, the notes, their locality, their value, and also the number of repetitions—and expression is conveyed by the voice of the reader to the performer.

In order that the beginner on the piano-forte may be able to transpose a certain piece of music from one key to another, I provide the respective keys of the key-board with printed consonants, and on a movable board I place the same corresponding arrangement of consonants, which are placed such distances apart as to correspond with the width of the keys. If the piece of music is written in the key bayan, (this is in the key of the consonants b y n,) and it is required to transpose this piece of music to the key of G, (of my method,) then the beginner places the movable board over the key-board in such a manner that its consonant g is on the consonant b of the key-board, and all the required changes are now indicated on the movable board—that is, wherever the consonant b occurs in the piece of music the operator plays g, and instead of d he plays y, and instead of l he plays v, &c. Thus the movable board transposes the piece of music from one key to another.

Any piece of music, whether harmonious and complicated, for piano-forte, organ, &c., or of a simpler form for other instruments, or for singing, can be written in a far simpler manner than with the notation now in use, and is easily transmitted by the telegraph and the telephone, as has been proved by experiment.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The herein-described method, consisting of designating the sounds of music by consonants and of representing the value or duration of the sounds by vowels, as specified.

2. A method of musical notation, consisting in designating the sounds as regards pitch by a series of consonants alone, and suitably indicating the length or duration of the said sounds, substantially as set forth.

3. A method of musical notation, which consists in designating the sounds of each octave by means of consonants and in employing different styles of type for the different octaves, substantially as set forth.

4. A method of musical notation, consisting in designating the sounds by consonants, the value or duration of such sounds by vowels, and the octave in which such sounds belong by the character of the lettering of said consonants, substantially as set forth.

5. The herein-described method of musical notation, consisting of designating the sounds of music by twelve different consonants and of representing the value or duration of sound by seven vowels, substantially as specified.

6. The herein described method of musical notation, consisting of representing the value or duration of sound by seven vowels, as specified.

7. The herein described method of musical notation, consisting of representing the value or duration of sound by the vowels u o ni a e i o u, substantially as specified.

8. The herein-described method of musical notation, consisting of designating the sounds of music by the consonants B, D, F, G, Y, L, Ch, N, V, R, S, and T, and by representing the value or duration of the sound by the vowels u o ni a e i o u, substantially as specified.

9. The herein-described method of musical notation, consisting of designating the sounds of music by the twelve consonants B, D, F, G, Y, L, Ch, N, V, R, S, and T, and of representing the value or duration of the sound by seven vowels, u o ni a e i o u, and representing the rests and pauses by the letter h, the length of the rest or pause depending on the vowel with which h is printed, substantially as specified.

10. The herein-described method of musical notation, consisting of designating the sounds of music by the twelve consonants B, D, F, G,

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Y, L, Ch, N. V, R, S, and T, representing the value or duration of the sound by seven vowels, uo ui a e i o u, and representing the single and double dots by the consonants c and x, substantially as specified.

11. A piece of music written in consonants designating the sounds of music, and in vowels representing the value or duration of the sound, substantially as described.

12. A piece of music written in twelve consonants designating the sounds of music, and in seven vowels representing the value or duration of the sound, substantially as described.

13. A piece of music written in the twelve consonants B, D, F, G, Y, L, Ch, N, V, R, S, and T, representing the twelve sounds of an octave, and in the seven vowels uo ui a e i o u, representing the value or duration of the said sounds, substantially as specified.

14. A piece of music written in the twelve consonants B, D, F, G, Y, L, Ch, N, V, R, S, and T, representing the twelve sounds of an octave, the consonants of each octave being printed in different styles of type, and the seven vowels uo ui a e i o u, representing the value or duration of the said sound, substantially as specified.

DIEGO FALLON.

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3 Sheets—Sheet 1.

L. A. FERNOW.

Music-Recording Attachment for Keyed Instruments.

No. 227,101. Patented May 4, 1880.

Fig. 1.

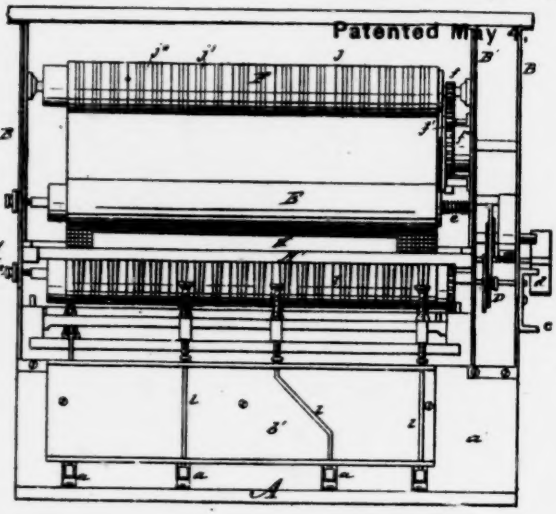
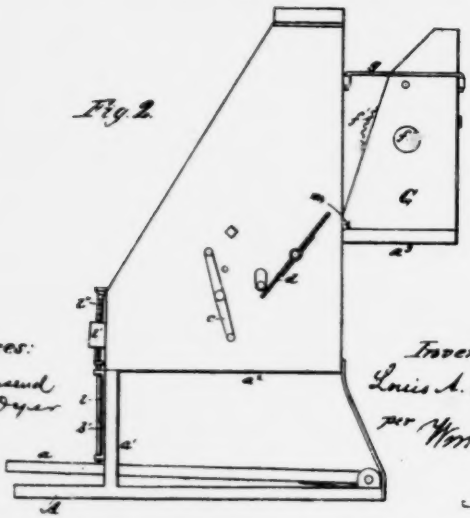


Fig. 2.



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3 Sheets—Sheet 2

L. A. FERNOW.

Music-Recording Attachment for K yed Instruments

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Fig. 3

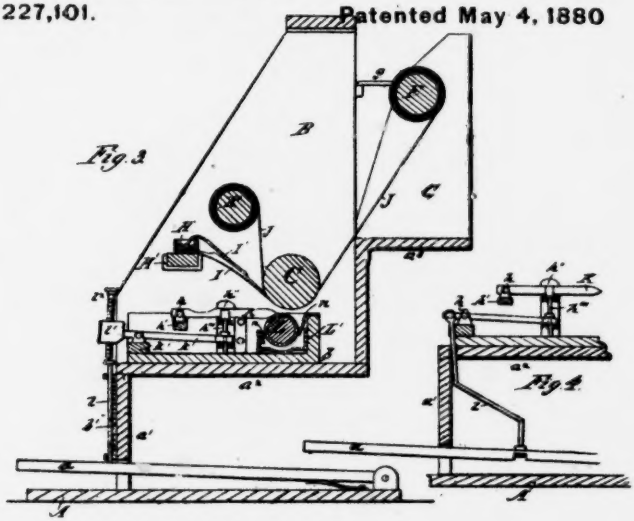
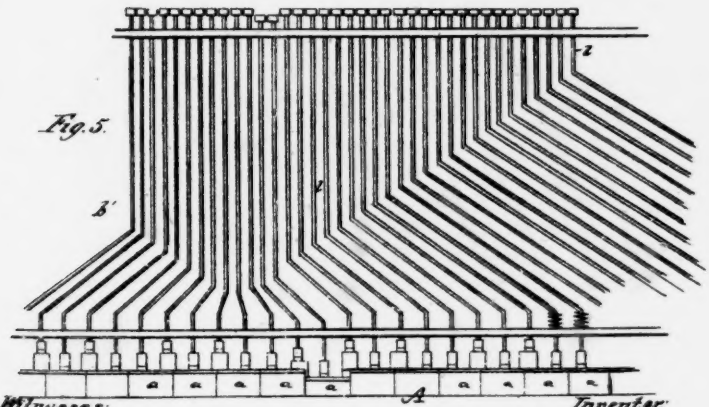


Fig. 4

Fig. 5.



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UNITED STATES PATENT OFFICE.

LOUIS A. FERNOW, OF CHICAGO, ILLINOIS.

MUSIC-RECORDING ATTACHMENT FOR KEYED INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 227,101, dated May 4, 1880.

Application filed January 31, 1880.

To all whom it may concern:

Be it known that I, LOUIS A. FERNOW, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Music-Recording Attachments for Keyed Instruments, of which the following is a specification.

This invention relates to an apparatus especially intended to aid composers of music, for writing down the improvisations of a pianist or organist, or for recording music, however executed, at the time that it is played upon an organ or piano.

The apparatus is designed to be removably attached to a piano or organ over the keyboard, and to operate in connection with vertically-guided rods resting upon or connected with the keys, which transmit the movement of the keys to recording pens or points vibrating below a strip of paper, cloth, or other equivalent material, upon which the record is marked. This strip of paper or other material is moved forward by a clock-work, and during its movement is longitudinally ruled with dividing-lines, which represent the keys in their successive order. By depressing a key its recording pen or point is raised and is pressed against the moving paper, where it will mark a dot or a line, according to the length of time the said key is held down, a short touch being represented by a single dot, while a longer note will be recorded by a more prolonged line.

My invention therein consists in the manner of ruling the paper or other record-receiving material to represent the keys and octaves, and in the several combinations of the parts of my apparatus, as fully pointed out by the claims.

In the accompanying drawings, forming a part hereof, Figure 1 represents a front elevation of my recording attachment, showing, for clearness, the wire connection of a few keys only. Fig. 2 is an end elevation of the same. Fig. 3 is a transverse vertical section through the central portion of the device. Fig. 4 is a similar section through a part of the apparatus, showing a modified form of the wire connection with the keys, the same being made within the piano-casing. Fig. 5 is a front elevation, showing the arrangement of the several rods for transmitting motion from the keys to the recording-pens; Fig. 6, a view, in perspective, showing a method of disconnecting, by a single movement, the key-wires when connected to the keys within the piano-casing, from the levers which vibrate the recording-pens; and Fig. 7, a view of a portion of the strip of paper ruled by my apparatus and having the record of notes played on the instrument.

Like letters denote corresponding parts in the several figures of the drawings.

A is the key-board of a piano, having the usual keys *a*. *a'* is the front board of the piano-casing. a^2 is the top board, upon which usually the note-rack is secured; and a^3 is the cover, shown as thrown open.

The frame of the recording attachment may be made of any suitable construction to inclose the parts and to permit of their removal and adjustment. It is intended to be tastefully ornamented, and has an inclined front, which may be closed, and will, at the same time, form a note-rack for holding sheet-music. This frame is shown as composed of three uprights, B B′ B″, secured upon a base-board, *b*, which, when the attachment is placed upon the piano, takes the place of the base-board of the note-rack, which is first removed.

To the front edge of the base-board *b* is secured a vertical board, *b'*, which hangs down against and in front of the front board, *a'*, of the piano-casing nearly to the keys.

The uprights B B′ B″ are connected at their top by a cross-strip, and the front of the uprights is covered by a hinged or removable lid to give access to the parts.

C is a roller removably journaled between the uprights B B′, and rotated at a uniform speed by a clock-work, D, of any usual or suitable construction, which is arranged between the uprights B′ B″, and is driven by one or more springs or weights.

The shaft of the roller C has a square socket at one end, which couples with the squared end of the driving-shaft of the clock-movement, and at its other end it is held by a pointed screw and holding-nut, b^2, Fig. 1, so that said roller can be readily removed to take out or put in the strip of paper or to adjust any of the parts of the apparatus. This roller C may be covered with cloth or rubber to increase the friction on the paper strip.

The clock-movement is regulated by a fan, *d*, located outside of the frame, which I pro-

pose to construct with adjustable wings, so that a slower or faster motion can be given to the feed-roller C, according to the time and character of the music played, whether the movement be fast or slow.

A pivoted stop-arm, *c*, within easy reach of the player, can be thrown into and out of the path of movement of the fan-arms, so as to stop or start the clock-work instantly.

E is a roller, which carries the roll of paper, cloth, or other material upon which the record is to be marked, and which is removably journaled on points in the frame, one of which points is a thumb-screw like that for holding the roller C. This roller E has a tension-spring, *e*, at one end to give the proper tension to the strip of paper.

The paper as it unwinds from the roller E passes downwardly under the roller C, and then upwardly to another roller, F, upon which it is wound in a roll. The roller F is removably journaled in a separate frame, G, placed anywhere upon the cover of the piano, and removably connected to the frame of the main attachment by rods *g*, having hooked ends, which enter eyes on the two frames and hold them rigidly a fixed distance apart.

The roller F is provided with a pinion, *f*, on its spindle near one end, which engages with a gear-wheel, *f'*, turned in one direction by a spring, *f''*. This spring is tightened by a thumb-winding knob, *f'''*, on one side of the frame G, and it turns the roller F so that the same will take up the paper as it is fed along and will maintain a proper tension of the same.

H is an ink-trough secured upon a cross-bar, H', which is removably held between the uprights B B' by being dropped into stirrups on the same. To the inner side of this bar are attached a row of ruling-pens, I, of any suitable construction, which are supplied with ink by a strip of cloth, I', placed in the ink-trough and extending over the edge of the same to the pens. These ruling-pens may be hinged to the cross-bar H', and be connected by suitable devices with the stop-arm *c*, so that their points will be removed from the paper at the same time that the clock-work is stopped, and will be pushed into contact with the paper when the clock-work is started, to prevent the blotting of the paper. These ruling-pens I are arranged side by side, so as to rule the paper with parallel lines as it moves between their points and the feed-roller C. This ruling may represent in any suitable way the different keys; but I prefer to designate the keys and the octaves in the manner shown in Fig. 7.

The strip J of paper, cloth, or other suitable material I make about the width of the ordinary music-sheet, and it contains within that width representations of all the keys and octaves of the instrument. The octaves are marked off by heavy lines *j*. The black or semi-toned keys are denoted by groups *j'* of lighter lines, and the white keys or whole tones are shown by the blank spaces *j''*. The paper is also represented as having the record of two measures of music played upon the instrument, which can be reproduced from the strip or transferred to the ordinary staff, as shown.

The pens I rule the paper directly above the recording-pens and against the surface of the same roller, and any lateral or uneven movement of the paper affects alike the key-lines as well as the note dots or lines, so that the paper will always show correctly what keys have been played. If the paper, however, were ruled before being placed in the apparatus, any unevenness in its movement would injure or destroy the correctness of the record.

K are the recording-pens, one for each key of the piano or organ, which are pivoted at the ends of their shanks in saddles *k*, having studs setting removably in holes in a cross-bar, *k'*, which is removably held in slots of the frame, so that each pen can be removed without disturbing any of the others, or all the pens can be taken out at the same time. These pens K extend from the saddles *k* rearwardly to the inking-roller, and rest loosely at about their centers in saddles *k''*, having pins *k'''*, which pass downwardly through two removable bars, *i i'*. The pins *k'''* between such bars have shoulders or buttons, which rest on the forked ends of levers *k*, pivoted to removable saddles (like the saddles *k*) on a bar, *k'*, which is removably held in the frame by horizontal slots near the front edge of the base-board *b*.

Wire rods *l* are situated vertically against the board *b'*, pass through flanges on the top and bottom edges of such board, and rest at their lower ends on the keys. These wire rods support at their upper ends the outer arms of the levers *k*, which have weights *l'*, for moving the levers and rods when the keys are depressed, and adjusting-screws *l''*, for regulating the movement of the levers *k*.

The rods *l* are bent, as shown in Fig. 5, toward the center of the key-board, so that all the keys of the piano will be condensed on the record-strip to about the width of the ordinary music-sheet.

The outer and longer wire rods will be more liable to spring than those nearer the center, and may, if desired, be made of heavier wire.

To make the pressure on the keys nearly alike, the outer wire rods can be partially supported by graduated spiral springs, two of which are shown on one side of Fig. 5.

It is intended that the wire rods shall not follow the keys all the way down, but only far enough to give sufficient movement to the levers *k*, so that when the hand is raised from the keys the impetus gained by them before reaching the ends of the wire rods will bring them back to their proper level.

The rods *l*, being carried by the hanging board *b'*, will be removed with the attachment when the same is lifted from the piano, as it may be at any time; but, if desired, the hanging board *b'* can be dispensed with, and the

rods *l* positively connected to the keys within the casing of the piano, as shown in Figs. 4 and 6.

In Fig. 6 is shown a method of readily disconnecting the levers of the recording attachment from the wire rods when the same are positively connected with the keys.

The attachment of the rods to the keys is made by loose joints or turning joints of any kind. The rods have hooks at their upper ends, which engage with the hooked ends of the levers, and a slotted sliding plate, *m*, is placed on the piano-casing, by moving which plate the wire rods can be connected or disconnected simultaneously with the levers *k*. This sliding plate *m* would be covered by the note-rack when the same is in position, its base-board being cut away on its under side for that purpose.

The recording pens rest at their marking ends when the keys are not depressed upon an inking-roller, L. This roller is connected by gear-wheels with the roller C, so as to be turned thereby in the opposite direction. It runs in an ink-trough, L′, which has strips *n*, of metal tipped with cloth, to protect the ink from dust, distribute the same evenly upon the roller, and prevent the spilling of the ink when the apparatus is moved.

A blotting-roller may be provided to dry the ink before the paper is rolled upon the roller F, or a sheet of ink-absorbing paper could be wound from a roller between the layers of the record-strip.

All the striking and working parts of the apparatus are, where possible, to be cushioned and made to work without noise, and the entire frame is to be lined with flannel or other cloth to deaden any sound.

When a musician wishes to record the piece he is playing, he adjusts the regulating-fan, if not already in proper adjustment, and moves the stop-arm out of connection with it. The clock-work then operates and turns the feed-roller C, which moves the paper. The music as it is played is marked upon the progressing paper, which forms a permanent record, from which the music can be reproduced upon the piano or organ, or can be converted into the usual sheet-music. If the front of the attachment is opened, the operator can ascertain, by looking at the paper as it winds upon the roller F, whether the pens are recording and ruling or not.

At any time the musician can stop the clock-work by simply moving the stop-arm.

Instead of the vibrating recording-pens, vibrating perforating-points could be used, which would perforate instead of mark the paper; or both the recording and ruling pens could be replaced by points which would mark the surface of a chemically-prepared paper.

Having thus fully described my apparatus and explained some of its advantages, what I claim as new therein, and desire to secure by Letters Patent, is—

1. In a music-recording attachment for keyed instruments, the record-strip J, ruled longitudinally with lines to distinguish the octaves and to denote the black and white keys, substantially as described and shown.

2. In a recording attachment for keyed musical instruments, the combination, with the record-sheet moved by clock-work, of the recording-pens operated by a lever-connection with the keys and the ruling-pens marking the sheet on the same roller as the recording-pens, substantially as described and shown.

3. In a recording attachment for keyed musical instruments, the combination, with the sheet of paper moved by clock-work, of the inking-roller and the recording-pens operated by the movement of the keys and arranged to vibrate between the inking-roller and the progressing paper, substantially as described and shown.

4. In a recording attachment for keyed musical instruments, the combination of the recording-paper wound from a supply-roller upon a receiving-roller, with an intermediate feeding-roller turned by clock-work, the inking-roller, and the recording-pens vibrated by the keys between the inking-roller and the feed-roller, substantially as described and shown.

5. In a recording attachment for keyed musical instruments, the combination, with the rods and levers for operating the recording-pens from the keys, of the weights and adjusting-screws, substantially as described and shown, for the purpose set forth.

6. In a recording attachment for keyed musical instruments, the combination, with the recording-pens and the levers for operating them, of the rods *l*, supported by the keys and bent toward the center of the key-board, substantially as described and shown.

LOUIS A. FERNOW.

Witnesses:
RICHD. N. DYER,
OLIVER W. MARBLE.

Nos. 110 & 111
W. S. M. P. Co. v. A. Co.

No. 608,771. Patented Aug. 9, 1898.

C. C. GUILFORD.

MUSICAL NOTATION.

(Application filed June 9, 1897.

(No Model.)

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

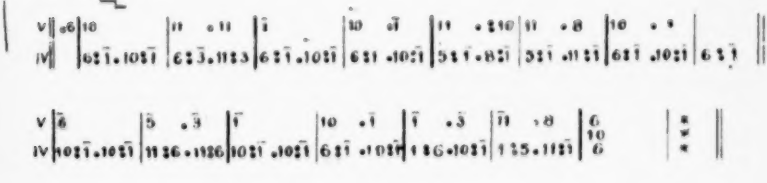


Fig. 7.

Witnesses.

Charles F. Blucher.

Anna J. Dailey

Inventor.

Charles C. Guilford

by Crosley & Goddard

Attys.

UNITED STATES PATENT OFFICE.

CHARLES C. GUILFORD, OF BOSTON, MASSACHUSETTS.

MUSICAL NOTATION.

SPECIFICATION forming part of Letters Patent No. 608,771, dated August 9, 1898.

Application filed June 8, 1897. Serial No. 639,705. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. GUILFORD, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Musical Notation, of which the following is a description sufficiently full, clear, and exact to enable those skilled in the art to which it appertains or with which it is most nearly connected to make and use the same.

My invention consists of certain novel improvements in musical notation, and has for its object to provide a simple and rational means by which composers may adequately express their conceptions and to secure a more perfect correspondence between musical notation and the system of music which musical notation is intended to express.

The system of music now in vogue recognizes a scale of twelve intervals; but the notation by which that scale is expressed is based upon a scale of but seven intervals. To express the additional five intervals, (those corresponding to the black keys of the piano-keyboard,) recourse is had to a perplexing and irrational system of sharps, flats, and naturals. It thus happens that the same tone has many different symbols. Furthermore, while the compass of a staff is less than one and one-third octaves the range of musical tones is more than seven octaves. This necessitates the use of a greater or less number of leger-lines above and below the staff, thus needlessly increasing the work of composition for the type-setter, besides consuming a large part of the page for only a few measures of the music, and, worse than all, it adds greatly to the difficulty of reading the music itself.

The present notation is just as defective in its means for expressing time as it is in its means for expressing pitch. Thus while the real unit of time is the measure the present notation attempts to make the note the unit, which results in the manifest absurdity of a measure or unit being composed of two, three, or four quarter-notes or eighth-notes, as the case may be. Not only is this illogical, but it results in the practical difficulty of requiring a different note-symbol for every possible variation in the duration of a tone and of a different rest-symbol for every variation in the duration of silence. The modern conception of musical time is that of accent or stress rather than of duration or meter. The present system of notation does not express this idea with certainty and precision.

With a view to overcoming the above deficiencies, crudities, and other faults as well I have devised a new notation which affords a simple and adequate means for expressing pitch, accent, and duration, which are the elements of modern music.

In the drawings, Figure 1 is a representation of a piano-keyboard to which are applied the symbols which I employ as the means for expressing pitch, the Roman numerals above the keyboard denoting the respective octaves or tone series in which the note is intended to be played, while the Arabic numerals below serve to denote the individual note of each octave or series. Fig. 2 illustrates the means which I employ for expressing accent in duple time; Fig. 3, the means for expressing accent in triple time; Fig. 4, the means for expressing accent in sextuple time. Fig. 5 illustrates the means which I employ to subdivide a beat or pulse into its parts. Fig. 6 illustrates the application of my notation to express the music for the well-known composition, "Home, Sweet Home," the first four and the last four measures only being written. Fig. 7 illustrates the means which I employ for denoting triplets, quintuplets, and septuplets, respectively.

I will now describe in detail the novel notation which I have devised as a means for expressing music.

Pitch.—The octave is the limit of every graduated tone series. I designate the respective octaves by Roman numerals. Thus the octave beginning with the lowest C is denoted by the Roman numeral II, the next octave above by the symbol III, the next by the symbol IV, and the highest by the symbol VIII. Each octave contains a graduated series of twelve tones, which I designate, respectively, 1 2 3 4 5 6 7 8 9 10 11 12. When but a few notes are to be played above or below the given octave, I prefer not to change the Roman numeral, but merely to add one, two, or three marks above a numeral to indicate that it is to be played one, two, or three octaves, respectively, higher than writ-

ton. For example, V|1 2 3 indicates that 1, 2, and 3 are to be played or sung in the fifth octave, V|$\dot{1}$ $\dot{2}$ $\dot{3}$ in the sixth octave, V|$\ddot{1}$ $\ddot{2}$ $\ddot{3}$ in the seventh octave, and V|$\dddot{1}$ $\dddot{2}$ $\dddot{3}$ in the eighth octave. In the same manner these marks placed below the note merely signify that the note is to be played, respectively, one, two, or three octaves lower than written. Thus V|$\underline{1}$ $\underline{2}$ $\underline{3}$ indicates that 1, 2, and 3 are to be played in the second octave. Where several different voices or instruments are to be heard, a Roman numeral must be used before the part written for each voice or instrument.

Accent.—I express accent or rhythm by means of vertical lines, the heavy lines denoting the primary or strong accent, the lighter lines denoting the secondary or weak accent. I have shown in Figs. 2, 3, and 4 of the drawings the means which I employ to express accent in duple, triple, and sextuple time, respectively. Each primary accent is counted one. The secondary accents indicated by the light vertical lines are counted two, three, four, &c., according to the number of them employed. Just as from one strong accent to the next constitutes a complete measure or unit of rhythm, so in my notation from one heavy vertical line to the next one indicates a complete measure.

Duration.—The light vertical lines subdivide the measure into beats or counts of equal duration, the number of beats or counts in a measure corresponding to the number of subdivisions or spaces between two successive heavy lines. For example, one light vertical line between two heavy ones divides that space into two subdivisions and indicates duple time; two light vertical lines divide the space into three subdivisions, indicating three beats to the measure, or what is known as "triple" time, and so on. These spaces or subdivisions may be of unequal width as printed on the sheet in order to receive a greater or less number of note-symbols; but it is to be understood that the values or duration which they express are equal. Thus in Fig. 5 the space between the two heavy lines is divided into two very unequal subdivisions by the light line, yet the duration of each count corresponding to these subdivisions is exactly the same.

When unaccented tones are used, I employ punctuation-marks to subdivide the spaces between two adjacent vertical lines, representing beats or counts, into parts. As shown in Fig. 5, I employ a period to divide the pulse into halves. These halves I subdivide into quarters by means of colons. The quarters I subdivide into eighths by commas, and these eighths may be again subdivided into sixteenths by means of hyphens. The hyphen only is used for triplets, (- -,) quintuplets, (- - - -,) and septuplets, (- - - - - -,) and the like. Intermediate time lengths or duration, such as are sometimes found in graces, ornaments, and cadenzas, may be indicated by the apostrophe, (',) although it is desirable that the composer's meaning should be definitely shown. A tone is first heard in that part of the count where the numeral representing it is placed and is to be continued until succeeded by the symbol of another tone or terminated by the symbol of silence, (*.) Silence continues until terminated by a symbol of tone, (a numeral.) Silence is denoted by the asterisk, (*.) I employ double vertical lines (‖) to mark the beginning or end of the phrase or period, as illustrated in Fig. 6.

It will be observed that I have devised a complete means for adequately expressing the ideas of pitch, accent, and duration without the use of any staff whatever, the note-symbol itself being made to express pitch absolutely; that I employ a single uniform series of note-symbols, each note having its own distinctive symbol and one symbol only for each note; that all variation in the note-symbol to express time is dispensed with and the measure itself is made the unit of rhythm, and that the use of all so-called "accidentals" is rendered wholly unnecessary.

The practical advantage of my notation in the mechanical work of preparing the sheet-music, and more especially in lightening the burden of the novice in the study of music, as well as in the matter of affording to composers a flexible and scientific vehicle for the expression of their conceptions is obvious.

It is apparent that changes may be made in the specific symbols which I employ as a means for expressing the various elements of music without departing from the spirit of my invention.

What I claim is—

1. The herein-described notation, comprising a Roman numeral; a series of Arabic numerals arranged in a horizontal line; heavy and light lines dividing said numerals into groups; punctuation-marks for the subdivision of said groups of numerals; and an asterisk to denote silence; as a means for expressing musical composition.

2. A musical notation comprising index-numerals corresponding to the several octaves or tone series, a series of numerals corresponding to the respective tones or degrees of the chromatic scale, each degree being expressed by a distinctive numeral, vertical dividing-lines arranged in proper order to denote accent, and punctuation-marks for subdividing the accents.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 7th day of June, A. D. 1897.

CHARLES C. GUILFORD

Witnesses:
GEO. N. GODDARD,
ARTHUR W. CROSSLEY

Nos. 110 & 111.

W. S. M. P. Co. v. A. Co.

2 Sheets--Sheet 1.

J. METZGER.

Automatic Music Recorders.

No. 149,593 Patented April 14, 1874.

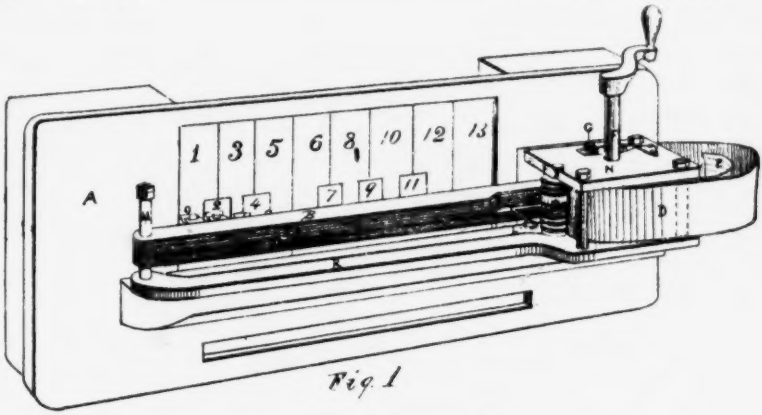


Fig. 1

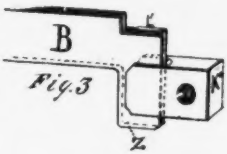


Fig. 3

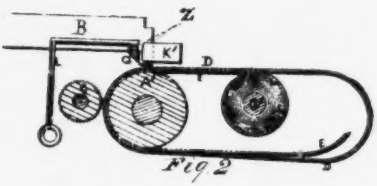


Fig. 2

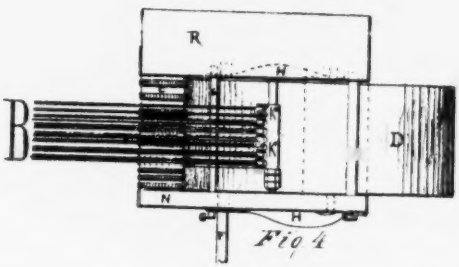


Fig. 4

WITNESSES.
Cyrus Wilcox,
H. E. Metcalf

INVENTOR.
Joseph Metzger
By C. A. Shaw
Att

2 Sheets--Sheet 2.

J. METZGER.

Automatic Music Recorders.

No. 149,593. Patented April 14, 1874.

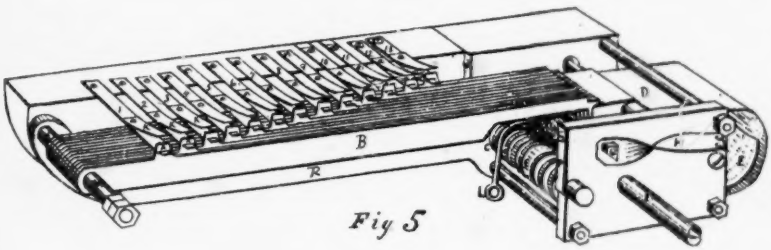


Fig 5

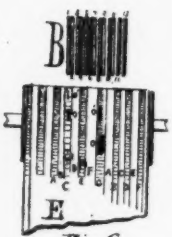


Fig. 6

Fig. 7

WITNESSES.
Cyrus Wilson.
H. E. Metcalf.

INVENTOR
Joseph Metzger.
By C. A. Shaw
Atty.

UNITED STATES PATENT OFFICE.

JOSEPH METZGER, OF CAMBRIDGE, MASSACHUSETTS.

IMPROVEMENT IN AUTOMATIC MUSIC-RECORDERS.

Specification forming part of Letters Patent No. **119,593**, dated April 14, 1874; application filed January 27, 1874.

To all whom it may concern:

Be it known that I, JOSEPH METZGER, of Cambridge, in the county of Middlesex, State of Massachusetts, have invented a certain new and useful Automatic Music-Registering Mechanism, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is an external view of a musical instrument provided with my improved automatic registering mechanism. Figs. 2, 3, and 4 are sectional views. Fig. 5 is an isometrical perspective view of the registering-mechanism. Figs. 6 and 7 details to be referred to.

My invention relates to that class of musical instruments which are played with keys, and consists of a novel construction and arrangement of devices, as hereinafter more fully set forth, the object being to provide a simple and accurate automatic registering-mechanism for piano-fortes, and similar musical instruments.

In Fig. 1 the instrument is represented as turned upon its side, A being the case, B the registering levers, C the printing or type-wheel, D the ink ribbon, E the paper, F the driving shaft, G the bar-printer, H the bar-printer spring, N R the plates or frame in which the various parts of the registering mechanism are disposed, and P a spring attached to the plate N for pressing the wheel C against the ribbon D. The bar-printer G is tetragonical in shape, (in cross section,) and is arranged as shown in Figs. 1, 4, and 5, being provided with the actuating lever mounted in springs H, and arranged over the wheel A', Fig. 2. The ordinals 1 to 13, inclusive, Fig. 1, represent the white and black keys, or keys for producing the tones and semitones of the music. The wheel C is provided with serrated bosses, which act as print a succession of short vertical lines on the paper-scroll E, as shown in Fig. 6, thus producing lines corresponding with the staff-lines in ordinary music. These bosses, by being irregularly spaced in relation to each other on the wheel, as shown in Fig. 1, also print the leger-lines of the staff, or a series of lines arranged above or below the real staff. The levers B, Fig. 5, have their center of motion at one end, being hung or pivoted so as to move freely on the stud M projecting from the frame R. These levers also hang suspended to the ends of the flat springs 1 to 13, each lever being provided with a spring, the opposite ends of the springs being attached to the block R attached to case A, and each spring provided with an auxiliary spring, K, (better shown in Fig. 7,) against which the key A acts. The ends of the levers B, opposite the stud M, are provided with hammers or projections Z, working in the guide K', Fig. 3, which, when the keys are pressed down, are brought into contact with the inked ribbon D at a point where it passes over the wheel A', Fig. 2. The levers corresponding with the half-tones or black keys 2 4 7 9 11 are provided with a lip or flange, L', Fig. 3, projecting over the adjoining lever in such a manner that when, for instance, the key 13 is pressed down, the key 2 will be carried with it, and thus the faces of two of the hammers Z be brought into contact with the paper, instead of one. In Fig. 2 a vertical section of the printing mechanism is shown, A' being the feed wheel, corresponding, also, to the platen of a printing press; E, the roll of paper to be printed; and D, a ribbon saturated with ink, and arranged around and outside of the wheel A' and paper E. It should be understood that the ribbon D may be of any required length, and supplied with ink in the usual manner of supplying such ribbons in ordinary hand stamping machines. It should also be understood that the paper E, after passing around the wheel A, may be received in any convenient manner.

From the foregoing description the nature and operation of my invention will be readily understood by all conversant in such matters.

The device described is more especially designed to register and preserve for future reference and use the fantasias or improvised music, and the printing mechanism may be actuated by clock-work, or by a weight or spring attached to the shaft F, in a manner which will readily suggest itself to any mechanic. The wheel A', Fig. 2, being caused to revolve to the left, the paper and

ribbon, being arranged relatively, as shown, will be caused to pass between said wheel and the wheel C, which latter wheel being pressed forcibly against the ribbon by the spring P, its serrated bosses will be caused to print staff-lines upon the paper under the ribbon, as shown in Fig. 6. The keys 1 to 13 being struck as required to produce the desired tones or notes will, through the springs K and C′, Fig. 7, cause the hammers Z to come into contact with the ribbon D at a point over the wheel A′, thus causing the paper to be printed or marked with a long or short mark or character corresponding with the length of time during which the hammer is kept in contact with the ribbon, and also with a wide mark for sharp or flat notes *o*, Fig. 6, or a natural note, *o′*, as the case may be.

It will, of course, be understood that to print a long or short note the hammer must be kept, by means of the proper key, in contact with the ribbon for the requisite or corresponding length of time. The characters or notes *o o′*, taking the place of the ordinary notes in music, are easily learned, and the staff-lines, being composed of a series of short vertical or cross-lines, as shown in Fig. 6, admit of having the notes *o o′* printed thereon, which could not be accomplished were they the usual continuous black lines.

The performer having played a bar or measure of music, the bar-printer G is brought into contact with the ribbon D by pressing the knee against the lower end of the lever L, Figs. 1, 2, and 5, sufficiently long to print the bar-line and divide the staff in a proper manner. When the knee is withdrawn from the lever, the springs H H, Fig. 4, in which it is disposed, raise the printer instantly from the ribbon. When the wheel A′, Fig. 2, is revolved to the left, the notes and bar-lines will be printed in advance of the staff-lines; and when revolved to the right, the staff-lines will be printed in advance of the notes and bar-lines. The nature of the staff and notes is such that it is immaterial in which direction the wheel A′ is revolved in that respect, although I prefer that it revolve to the left. It will be seen that when revolved to the right, the paper E must be delivered from the under, instead of the upper, side of the roller G Fig. 2, and to the under, instead of the upper, side of the roller A′.

It will be furthermore understood that the keys 1 to 13, Fig. 1 are constructed and arranged in the usual manner to act upon strings or reeds, as in a piano-forte or organ, in addition to operating the levers B. The letters A B C D E F G A B C D E F, Fig. 6, represent lines and spaces of the staff.

I sometimes construct my registering mechanism without the ribbon, and print the characters representing notes upon the paper by means of points arranged on the levers after the manner of forming the letters in a Morse telegraphic instrument, but prefer the use of the inked ribbon, as described. The staff-lines may each consist of several very fine parallel lines arranged longitudinally on the paper without departing from the spirit of my invention in that respect.

I am aware that it is common in certain telegraphic instruments to print characters representing the letters of the alphabet upon paper, in a manner similar in many respects to the method described; but my invention is materially different in its essential features from all such devices; and I therefore do not herein claim any part of such telegraphic instruments, when in and of itself considered; but

What I claim is—

1. The music-registering mechanism described, consisting of the staff-printing wheel C, feeding platen-wheel A′, paper E, inked ribbon D, and levers B, in combination with the key-board of a musical instrument, substantially as and for the purpose specified.

2. The combination of the lever L, spring H, and bar-printer G with the roller A′, as and for the purpose specified.

3. In a music-registering mechanism, the staff-printing wheel C, having the bosses irregularly arranged, and constructed as described, so as to print not only the regular staff, but the leger-lines thereof, as specified.

4. In a music-registering mechanism, the levers B, provided with the printing hammers Z and coupling-flanges L, substantially as and for the purposes specified.

5. In combination with the keys of a musical instrument and the levers B, the springs C′, provided with the auxiliary springs K, arranged to operate substantially as shown.

JOSEPH METZGER.

Witnesses:
C. A. SHAW,
FRANKLIN J. BOLLINS.

UNITED STATES PATENT OFFICE.

GIDEON L. PETERSON, OF MINNEAPOLIS, MINNESOTA.

MUSIC NOTATION.

SPECIFICATION forming part of Letters Patent No. 663,512, dated December 11, 1900.

Application filed July 3, 1899. Serial No. 722,641. (No specimens.)

To all whom it may concern:

Be it known that I, GIDEON L. PETERSON, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and useful Improvement in Music Notation, of which the following is a description, reference being had to the accompanying drawing, which forms a part of this specification.

My invention relates to improvements in music notation; and the main object of my invention is the provision of a simple method of writing music by a novel arrangement of numerals, as herein described, shown, and claimed.

In the drawing I have illustrated a number of bars of "Home, Sweet Home," written with a bass-line and an accompaniment, which is played as follows: I first pick the strings or strike the keys 8 and 9 of the upper (soprano) line singly, then 10 of the same line, and simultaneously therewith I pick or strike 1 and simultaneously therewith 3 and 5 three times, the numeral "3" above the horizontal bar signifying how many times the numera's "3" and "5" below the bar are to be picked or struck. I then pick the string or strike the key 11 of the upper (soprano) line, and simultaneously therewith I pick or strike 1 in the bass-line, and as an accompaniment therefor pick or strike 4 and 6 three times, as before described, the numeral above the bar indicating how many times the figures below the bar are to be played.

What I claim as my invention, and desire to secure by Letters Patent, is—

The herein-described and shown music notation, written in a single horizontal space, an upper horizontal line of numerals arranged in said space denoting the notes of the soprano, another line of horizontal numbers below the soprano-numbers denoting the bass, and the accompaniment in the same line as the bass-numbers and consisting of a short horizontal line having numbers below the line denoting the chord to be played and having a single number above the line to denote the number of times the chord is to be repeated.

GIDEON L. PETERSON.

Witnesses:
E. C. MORSE,
E. K. POWERS.

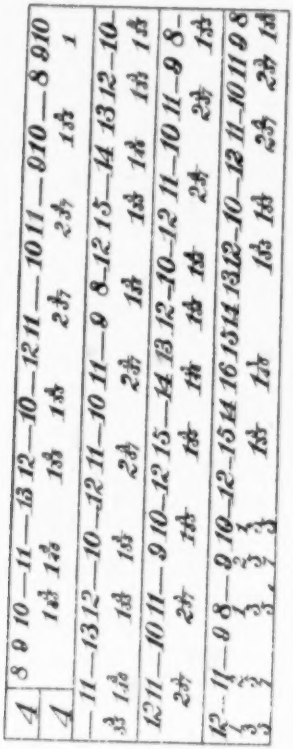
No. 663,512. Patented Dec. 11, 1900.

G. L. PETERSON.

MUSIC NOTATION.

(Application filed July 3, 1900.

(No Model.)



Witnesses
E. Powers
E. K. Powers

Inventor
Gideon L. Peterson
By Attorney
J. W. Powers

(No Model.) 7 Sheets—Sheet 1.

G. PILAR DE PILCHAU.

MELOGRAPH OR MUSIC RECORDING ATTACHMENT FOR PIANOS.

No. 507,840. Patented Oct. 31, 1893.

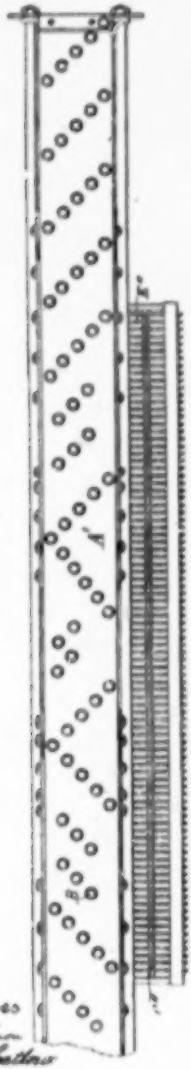


Fig. 1

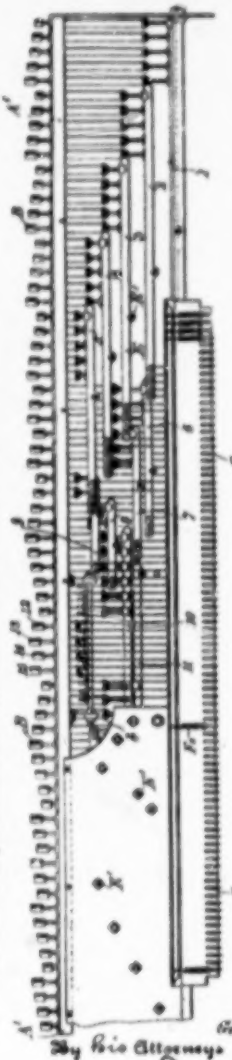


Fig. 2

Witnesses
Emil Baptiste
James W. Cather

Inventor
Gregorio Pilar de Pilchau
By his Attorneys
Duncan & Page

(No Model.) 7 Sheets—Sheet 2

G. PILAR DE PILCHAU.

MELOGRAPH OR MUSIC RECORDING ATTACHMENT FOR PIANOS.

No. 507,840. Patented Oct. 31, 1893.

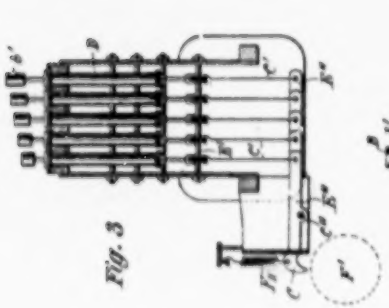


Fig. 3

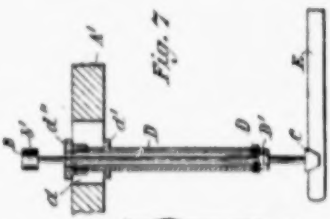


Fig. 7

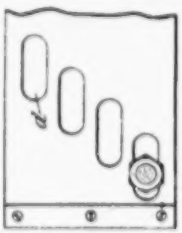


Fig. 6

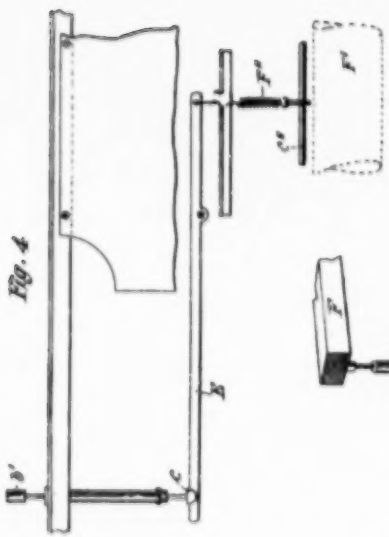


Fig. 4

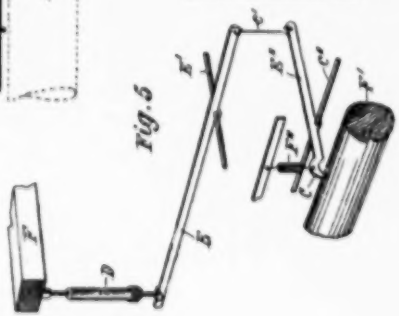


Fig. 5

Witnesses
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(No Model.) 7 Sheets—Sheet 3.

G. PILAR DE PILCHAU.

MELOGRAPH OR MUSIC RECORDING ATTACHMENT FOR PIANOS.

No. 507,840. Patented Oct. 31, 1893.

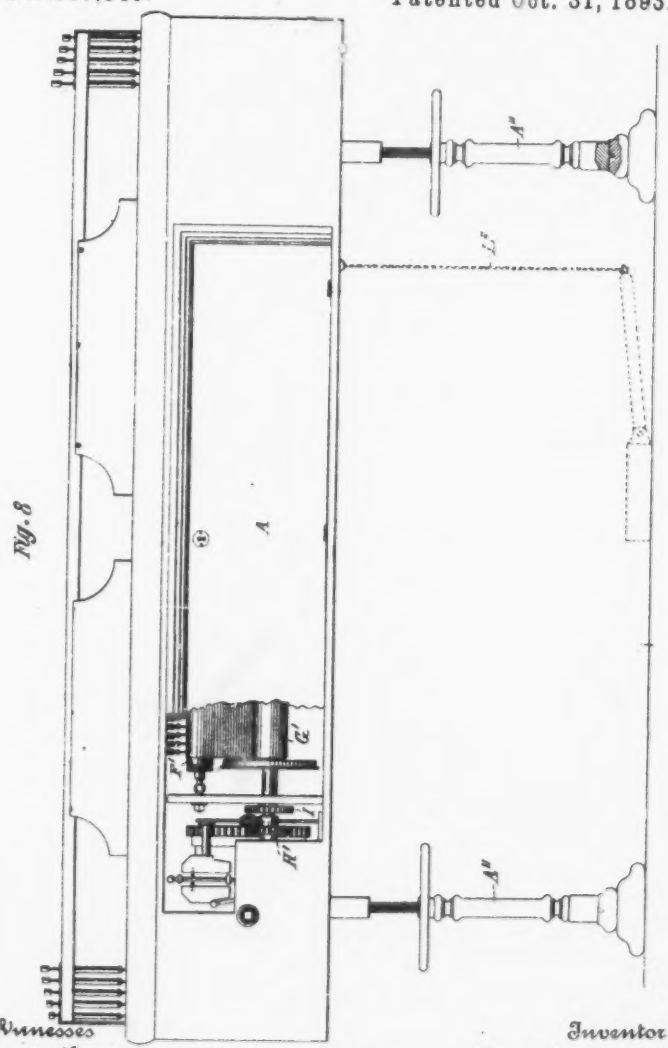

Fig. 8.

Witnesses
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(No Model.) 7 Sheets—Sheet 4.

G. PILAR DE PILCHAU.

MELOGRAPH OR MUSIC RECORDING ATTACIMENT FOR PIANOS.

No. 507,840. Patented Oct. 31, 1893.

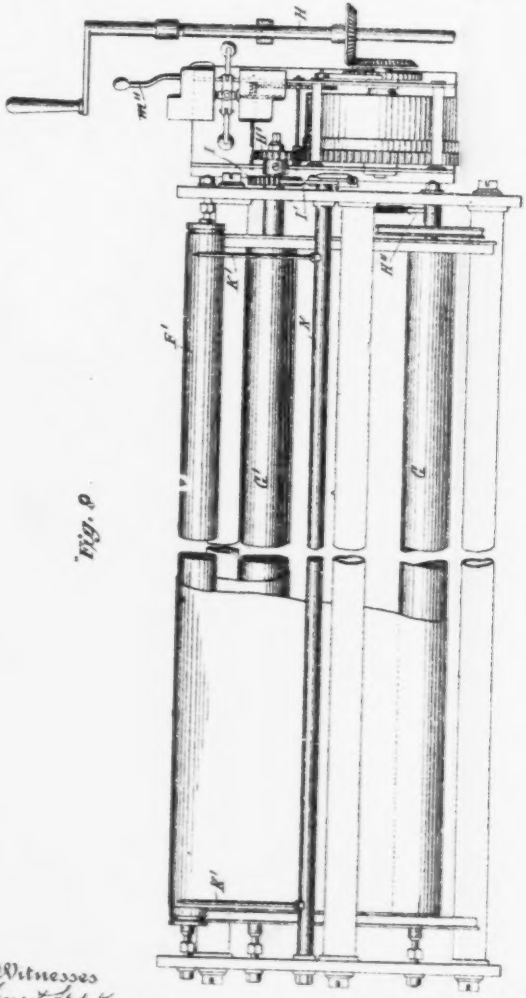

Fig. 9.

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(No Model.) 7 Sheets—Sheet 5.

G. PILAR DE PILCHAU.

MELOGRAPH OR MUSIC RECORDING ATTACHMENT FOR PIANOS.

No. 507,840. Patented Oct. 31, 1893.

Fig. 12

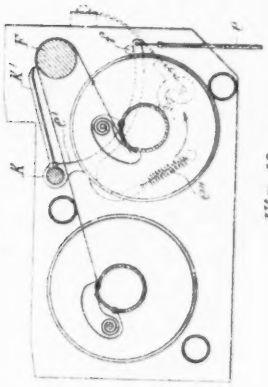


Fig. 13

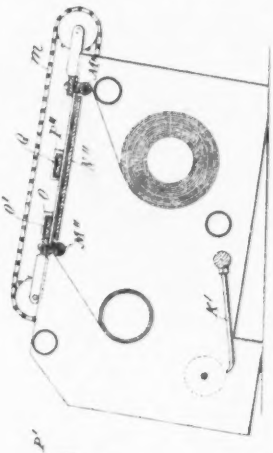


Fig. 10

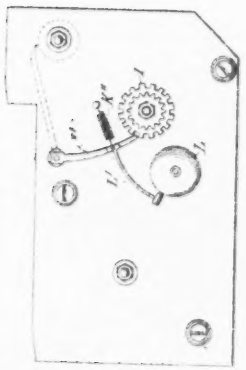
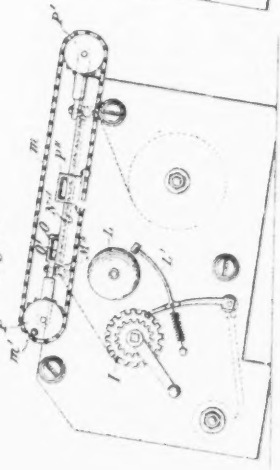


Fig. 11



Witnesses
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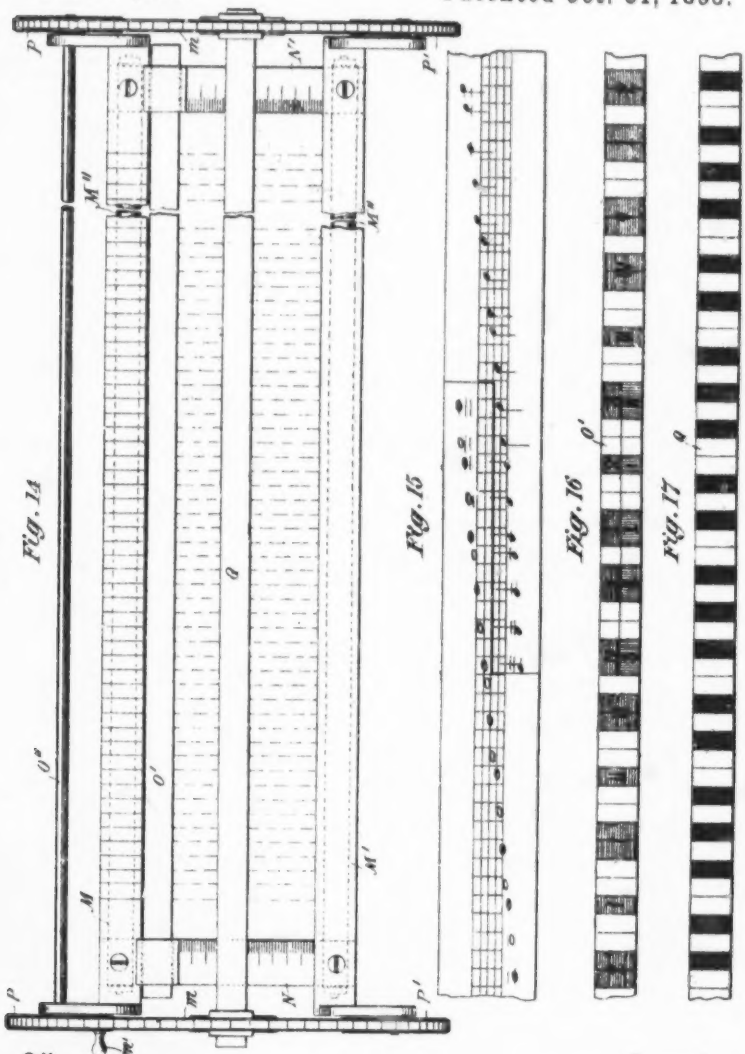
Nos. 110 & 111.
W. S. M. P. Co. v. A. Co

(No Model.) 7 Sheets—Sheet 6.

G. PILAR DE PILCHAU.

MELOGRAPH OR MUSIC RECORDING ATTACHMENT FOR PIANOS.

No. 507,840. Patented Oct. 31, 1893.



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Nos. 110 & 111.
W. S. M. P. Co. v. A. Co.

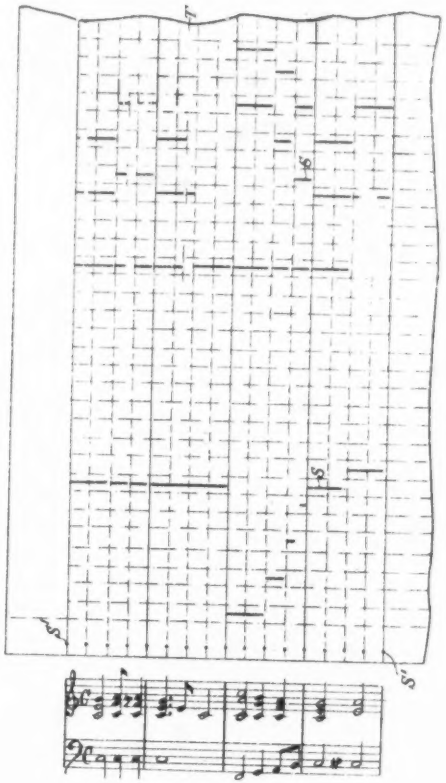
(No Model.) 7 Sheets—Sheet 7.

G. PILAR DE PILCHAU.

MELOGRAPH OR MUSIC RECORDING ATTACHMENT FOR PIANOS.

No. 507,840. Patented Oct. 31, 1893.

Fig. 18



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UNITED STATES PATENT OFFICE.

GEORGES PILAR DE PILCHAU, OF ST. PETERSBURG, RUSSIA.

MELOGRAPH OR MUSIC-RECORDING ATTACHMENT FOR PIANOS

SPECIFICATION forming part of Letters Patent No. 507,840, dated October 31, 1893.

Application filed June 10, 1893. Serial No. 477,215. (No model.)

To all whom it may concern:

Be it known that I, GEORGES PILAR DE PILCHAU, a subject of the Czar of Russia, and a resident of St. Petersburg, in the Empire of Russia, have invented a new and useful Improvement in Melographs or Music Recording Attachments for Pianos, of which the following is a specification, reference being had to the drawings accompanying and forming a part of the same.

The subject of my present application is an improvement in mechanical appliances for marking on a suitable surface the value and duration of the notes of a musical composition while the same is being performed on a piano, and thus to produce a permanent record which may at any time be translated and transcribed into the ordinary musical notation.

The object of the invention is to provide a device which may be attached to any piano and which will indicate upon a traveling band or sheet of paper or like material certain defined marks or impressions which by their relative positions will indicate all the keys that have been depressed in playing and the order of depression, and by their special character the duration of each impression, and also to provide an instrument or device by means of which the value, position and duration of each note in the musical scale corresponding to the marks or impressions on the band may be at once ascertained. My improved apparatus for this purpose is purely mechanical in its construction. The recording mechanism consists, essentially, of a series of marking levers, one for each piano key, and in positions to be engaged by said keys when depressed, and a sheet of paper movable at a determined rate which receives the impression made by said levers. This portion of the apparatus also involves devices for indicating the measure or tempo, and other devices hereinafter to be described. The translating mechanism comprises a system of scales to which all parts of the marked or impressed sheet are successively applied, and which indicate directly the position and duration of each note corresponding to the marks, the measure or time of the piece and the intervals or rests.

I shall proceed now to describe my improved apparatus by reference to the accompanying drawings.

Figure 1 is a plan view of the recording mechanism for attachment to the piano. Fig. 2 is a rear view in elevation of the same. Fig. 3 is a vertical cross-section of the recording mechanism. Fig. 4 is a development on an enlarged scale of one of the marking levers. Fig. 5 is a similar view but in perspective. Fig. 6 is a plan view of a detail in the mechanism of the recording instrument. Fig. 7 is a vertical section of a plunger by means of which the movement of a key is transmitted to its corresponding marking lever. Fig. 8 is a front elevation of the instrument as applied to a piano, a portion of the front casing being removed. Fig. 9 is a view in elevation and on an enlarged scale of the mechanism for supporting, moving and marking the paper. Fig. 10 is an end view of Fig. 9 with the driving mechanism detached. Fig. 11 is also an end view of the same mechanism inverted and with the deciphering or translating mechanism attached. Fig. 12 is a cross-section of Fig. 9 taken at any point between the end plates of the instrument and the rolls. Fig. 13 is a cross-section of the instrument of Fig. 9, in its inverted position and taken at any point through the rolls. Fig. 14 is a plan view of the system of translating or deciphering scales. Fig. 15 is a plan view enlarged, of a rule or scale used in the apparatus. Figs. 16 and 17 are modified forms of the same. Fig. 18 is a diagram representing a portion of a sheet with the marks thereon, and the ordinary method of representing the notes to which such marks correspond.

Similar letters and numerals of reference indicate corresponding parts in the several figures and sheets of the drawings.

The apparatus is contained in a box or case A of suitable character, which is adapted to be attached to a piano as by means of the vertically adjustable standards or supports A″ Fig. 8.

B B indicate a series of plungers or rods which are designed to be depressed by the piano keys and to impart this movement to the recording mechanism. As there is a separate plunger for each key there will generally be employed eighty-five plungers to adapt the instrument to a seven octave piano. The

length of the plate A' through which these plungers work will be, of course, at least equal to that of the key-board, but it is essential to the practicability of the device that the marks or impressions made on a sheet of paper by the plungers and the accessories should be confined to a very much narrower space, and for this purpose a special arrangement of levers is employed with the plungers and markers which latter are of such character as to occupy but little space, and are closely grouped together.

I employ on each side of the center of the instrument different groups of levers to accomplish this purpose. This particular arrangement may be somewhat modified, but I prefer to use the following:—on one side, five groups of five levers each; two groups of three levers each, two groups of two levers each; one group on the right of the center of six levers, and four central levers, arranged to oscillate at right angles to the others. The arrangement of levers on the opposite side of the center of the instrument is in all respects the same, except that instead of one group of six levers, five only are contained in such group.

The several levers of each of the above described groups are parallel to each other in the same plane while the several groups lie in different planes. To distinguish these groups I have marked them in Fig. 2 as follows: The groups of five levers are designated by the numerals 1, 2, 3, 4, 5; those of three levers by 6, 7; those of two by 8, 9; the right-hand group of six levers by 10; the left-hand group of five levers by 11, and the four central levers by the numerals 12, 13, 14, 15, attached to the plungers that operate them. All of the levers described are levers of the first order with the exception of the two single groups of five and six respectively, which are of the second order, but these are connected by wires, not shown in drawings, with intermediate levers pivoted on an axis b' and parallel with the four levers of keys 12, 13, 14 and 15. Each lever is connected with one of a series of markers C, which are adapted, as hereinafter set forth, to make an impression or imprint on a traveling sheet of paper or other material when its particular lever is oscillated.

The mechanical connections between the plungers and the markers are substantially the same in all cases, and will be understood by a description of one. Each plunger B is provided with a rubber head b' so as to avoid making a sound when struck by a key. It also passes through a small tube or sleeve D secured to the plate A', and below the said sleeve a nut D' is secured to the plunger rod above which is a felt or leather washer D'' which deadens the sound when the plunger returns to its normal position after being depressed.

The lower end of the plunger rod carries a saddle c that engages with a lever E mounted on an axis E'. The opposite end of this lever is connected by a wire c' with the end of a second lever E''' turning on an axis c''. The end of this second lever is formed like a hook or is otherwise adapted to serve as a marker or marking point.

The relative positions of the parts are shown in Fig. 5. When the plunger B is struck by the depression of one of the piano keys F the marking point of the lever E''' is forced into contact with the roll F' which carries the paper and continues thus as long as the key F is held down. As soon as the latter is released the parts are caused to resume their normal positions by a spring F'' connecting the marking point with a stationary support.

In order to secure a certain degree of adjustability of the plungers with reference to the keys of different pianos, each of the sleeves D is passed through a slot as d in the plate A' and is provided with a collar d' beneath the plate and a nut d'' above it. By loosening this nut the sleeve and plunger may be adjusted to the desired point in the slot and then secured. In order to secure greater freedom of movement for the plungers and levers, the latter are made in different lengths, while to compensate for such difference the plungers stand at different heights above the plate A' and are placed at varying distances from the pivotal axes of the levers. The extent of movement of the levers is thus equalized by the greater or less range of vertical movement of the plungers, some of which will be encountered by the piano keys sooner than others, and also by the distance of the plungers from the fulcrum of the lever.

In the box or case A and beneath the row of marking points is the paper-carrying mechanism. The paper is reeled on a roll G and is carried over and around the impression roll F' to the roll G' upon which it is wound. The proper movement of the paper web is effected by means of a clock-work wound by a key or a handle H, and imparting rotation to the roll G' through a suitable pinion H'. To preserve a uniform movement of the roll G a spring-brake H''' presses upon an exposed portion of the surface of said roll, and suitable means such as a fan or centrifugal regulator is employed in connection with the clock-work for varying or adjusting the speed of movement of the paper.

Any desired device such as an ordinary inking ribbon may be employed in conjunction with the markers for obtaining a clear and distinct record.

The mechanism above described constitutes the means for recording the depression of keys. The position of a mark to the right or left indicates the particular key touched or the note corresponding thereto. The length of the mark indicates the duration of depression or the length of the corresponding note. Now, in order to indicate the measure or tempo, I employ the following device. On the axle of the roller G' is secured a ratchet wheel

I with the teeth of which engages a curved arm or pawl I′ which is rigidly secured to the projecting end of a rock-shaft K. This latter carries two pointed pins K′ K′ which act upon the traveling paper as markers. A spring K″ is connected with the arm I′ and holds it in contact with the ratchet wheel I. It also tends to lift the marking points K′ away from the paper. As the teeth of the wheel I successively pass under the arm I′ the latter causes the points K′ to make marks or dots upon the paper near its edges which indicate the divisions or beats of a measure, while at the same time the performer is notified of each beat by the sound of a bell L which is struck by a hammer L′ attached to the arm I′ and which serves as a metronome.

Should the performer prefer to dispense with the automatic marking of the time, and beat time with his foot, he may do so by pressing a pedal L″ which is connected by a cord *e* with an arm *e*′ which is carried by the shaft K and which may be made fast to the same when desired. A spring *e*″ counterbalances the pedal and arm, and a stop *f* limits the movement of the shaft and marker K′. When these devices are used the arm I′ is disconnected from the shaft K. A stop *m*″ of suitable character projects from the instrument in a position to be moved by the knee of the performer. By shifting this the instrument will be stopped or started. No special device is required for this purpose.

Figs. 14 to 18 inclusive illustrate the mechanism for deciphering the record made by the markers on the sheet. This device is composed essentially of a rectangular frame the sides of which are straight edges on which are or may be marked scales of equal parts. The sides of the frame are two plates M M′ on which, or generally on one of which only, are division marks corresponding in number to the markers in the recording mechanism, and with two wider divisions at the ends for the time markers. The side bars or plates N N′ of the frame are similarly divided in scales of equal parts to serve as a measure of the length of notes. Brackets are secured to the plates M M′ near their ends to afford bearings for guide rolls M″ for the paper, (see Fig. 11) and for the support of a wooden platen or table N″. Guide plates O O are secured to the sides of the frame, and immediately adjacent to the scale M and through them passes and by them is held a ruler or flat strip O′. On the frame are also provided bearings for a spindle O″, having grooved or sprocket wheels P′ at their ends connected by bands or chain belts *m* with similar wheels P″. To these belts are attached the guides P‴ through which passes a ruler Q, which may be adjusted to any desired distance from the ruler O′ by turning either of the wheels P′ by a handle as *m*′, and which is maintained in parallelism with the ruler O′. The rulers O′ and Q, one or both, are marked off into divisions equal to those on the plate M and the notes or their names are marked on them corresponding to each division. The number of such divisions is, however, greater than on the plate M in order that the apparatus may be adapted to instruments with different numbers of keys, without reference to the note from which it begins. This frame is adapted for attachment to the under side of the case A, from which it is or may be detached except when in actual use, the manner of its use being as follows: When a desired length of paper has been marked in the manner indicated above, the rollers G and G′ with their frame are detached from the clock-work, taken from the case A and placed upside down on a table. The web of paper is then rewound from roll G′ back onto roll G. The deciphering device is then secured to the frame and the web of paper carried up over and around the guide rolls M″ and platform N″ and again secured to the roll G′ on the axis of which a handle may be secured. The rulers O′ Q which, as above stated, have divisions equal in width to but greater in number than those on the plate M, are then adjusted transversely so that the first of the eighty-five divisions on the plate M will lie opposite the division on the ruler on which the note is marked corresponding with the lowest key of the keyboard of the piano. The paper is then moved over the platform N″ by turning the roll G′ and all the marks thereon will occur between the divisions of the plate M and rulers O′ Q. For better indicating the divisions, dotted lines are drawn across the instrument and these may represent threads actually stretched in such positions, although the use of these is not ordinarily required. Since the notes are marked on the rulers O′ and Q, as indicated in Fig. 15, the position of a dot or a line between the division lines determines the corresponding note, while the length of the note is determined by the relative length of the mark on the paper measured by the scales on the side plates N N′. In order to divide the piece by measure the ruler Q is to be the proper distance from the ruler O′.

In the recording apparatus the time marks make dots on the edges of the paper corresponding to the beats, so that, for example, a measure of four-four time is indicated by four dots. In such case, therefore, the paper is moved to bring the first pair of dots made by the time-markers to the edge of the ruler O′; the ruler Q is then moved from the ruler O′ through the space of four dots, and all the marks exposed between the two rulers will be the notes included in this measure. When all the notes have been transcribed the paper is moved to expose the marks of the next measure, and so on. The movement of the paper is kept uniform and prevented from inequality by the arm I′ engaging with and passing over the teeth of the wheel I.

It will usually be more convenient to tran-

scribe the notes by placing the rollers and their frame in a vertical position and on the left of the writer, as the marks exposed in one division and belonging to the same chord will lie in a vertical line as they do in music.

In order to assist the copyist, there may be substituted for the rulers O' and Q above described, rulers of the character shown in Figs. 16 and 17. These rulers are divided into equal parts in the same way as those previously described, but the divisions are distinguished by different colors. Five black sections, for example, correspond with the five lines of the treble staff; five red sections to the lines of the bass staff; while the additional lines above and below the treble staff are colored blue, those additional to the bass yellow, and the sections corresponding to spaces between the lines are white. The lines of both staffs are indicated by Roman numerals I, II, III, IV, V, placed on the corresponding sections, while the lines above and below are indicated by Arabic numerals. Each section consists of two divisions corresponding to a tone and semi-tone, except, of course, those for B and E, which have but one division each, for when these notes are raised a half tone they change their position on the musical scale, that is, they become C or F. The lower or movable ruler is arbitrarily marked so as to assist the eye in determining the divisions. The rulers in such an arrangement represent on a larger scale, the usual musical staff of five lines with all the additional lines above and below. The signs made on the paper which are to be deciphered, passing under the divisions of the rulers, occur in the spaces between them according to their tone, exactly as they are to be written down on the music sheet. The deciphering of the marks by means of these rulers is convenient and easy, for the reason that the colors of the sections are at once apparent, while the number or figure indicates at a glance the line or space where the note belongs.

Fig. 18 represents a portion of a paper sheet T which has been marked and beneath it the corresponding music written out in the ordinary way.

S S indicate the marks that stand for notes, and S' are the time dots. For purposes of illustration the lines have been drawn across the paper to indicate the imaginary division lines.

From the fact that the rulers are adjustable transversely, and provided with longer scales or series of divisions than the plates M it follows that a performer may transpose a composition from one key to any other by the proper adjustment of the rulers with reference to the paper and the plates M.

The entire apparatus is adapted to be contained in the wooden case or box A. The clock-work is secured in the box and to the bottom of the same, but the system of rollers is removable, as above set forth. Any suitable devices may be used to secure it in place, or to adjust it in the proper position in the box.

The apparatus when placed under a piano occupies but little space, not interfering at all with the free use of the instrument. It may be adjusted to any piano or other instrument provided with keys, the only thing necessary for its application being to remove the board of a piano case under the keys or to cut a slot of proper width in the same. The plungers may be lowered so as not to be touched by the keys by adjusting the height of the standards A'' which support the device.

Larger pianos might require a greater number of levers, but as the extreme notes are seldom used this will seldom be necessary. It is even possible without impairing, but in fact increasing the efficacy of the instrument, to utilize one or two end levers to record the depressions of the pedals, which for this purpose would be connected to such levers in any convenient manner.

Any other suitable material may be used to receive the record, but paper I consider to be the best in practice.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a melograph the combination with a series of plungers standing at different heights and out of alignment and adapted to be placed in position under the keys of a piano, of compensating levers one for each plunger, a series of levers with marking points grouped near the center of the series of plungers and with their points in alignment, and connections between the same and the compensating levers, as set forth.

2. In a melograph the combination with a series of plungers adapted to be placed in position under the keys of a piano, of groups of levers, one lever for each key, the levers of each group being parallel and in the same plane, and the several groups lying in different planes, a series of marking levers parallel to each other and with their marking points in alignment grouped near the center of the series of plungers, connections between the marking levers and the others and a traveling surface or web for receiving the impressions of the marking points, as set forth.

3. In a melograph the combination with a series of plungers standing at different heights and out of alignment, and adapted to be placed in position under the keys of a piano, of a series of levers, one lever for each plunger, the levers being of varying lengths and extending toward the center of the series of plungers, marking levers with their marking points in alignment grouped in parallelism near the center of the group of plungers, connections between the same and the other levers, and a traveling web of paper for receiving in transverse lines the impressions of the marking levers, as set forth.

4. In a melograph the combination with a

COPY BOUND

series of plungers adapted to be placed under the keys of a piano and extending over a space equal to the length of the key-board, a series of parallel marking levers grouped together near the center of the series of plungers, and levers intermediate to the plungers and marking levers, those of the intermediate levers near the ends of the series being levers of the first order, those nearer the center being levers of the second order, and a given number in the center being mounted at right angles to the planes of all the others, as set forth.

5. A device for deciphering the marks or impressions of the marking levers of a melograph, substantially as herein described, consisting of the combination with a rectangular frame through which the paper is drawn, of a fixed transverse scale of equal parts, a movable scale parallel therewith, and one or more side scales of equal parts or divisions, as set forth.

6. In a melograph the combination with a box or case and a series of marking levers contained therein and adapted for attachment to a piano, of a series of plungers for operating the marking levers, the said plungers being disposed so as to lie under the keys when the instrument is attached to the piano, and adjustable vertically and horizontally with respect to the keys by which they are encountered, as set forth.

7. The combination in a melograph of a series of vertical plungers adapted to be placed in position under the keys of a piano, and a series of marking levers operated by said plungers, of a box or case for containing the said devices, and vertically adjustable supports or legs for the box by which the plungers may be simultaneously brought into or withdrawn from the path or range of movement of the piano keys, as set forth.

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UND TO CLOSE IN CENTER

COPY BOUND

No. 722,904. PATENTED MAR. 17, 1903.

L. O. RISSMAN.

APPARATUS FOR RECORDING MUSIC.

APPLICATION FILED DEC. 2, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

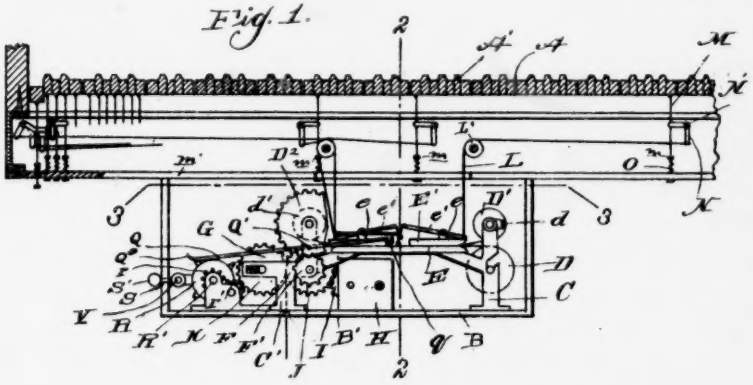


Fig. 2.

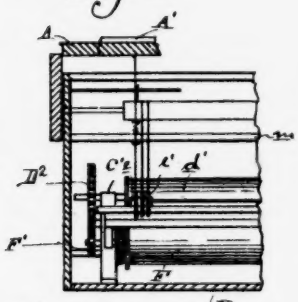


Fig. 3.

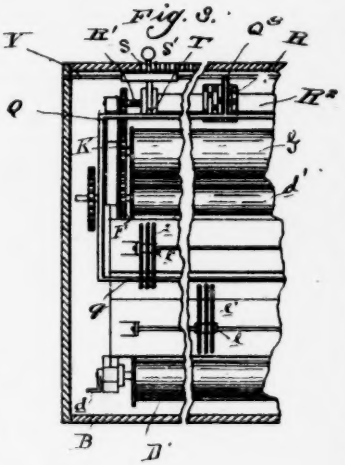
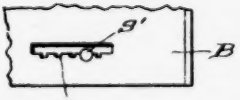


Fig. 4.



Witnesses:
C. F. Wilson
A. Abbey

Inventor:
Lillian O. Rissman,
By Franklin H. Hough
Attorney.

TO CLOSE IN CENTER

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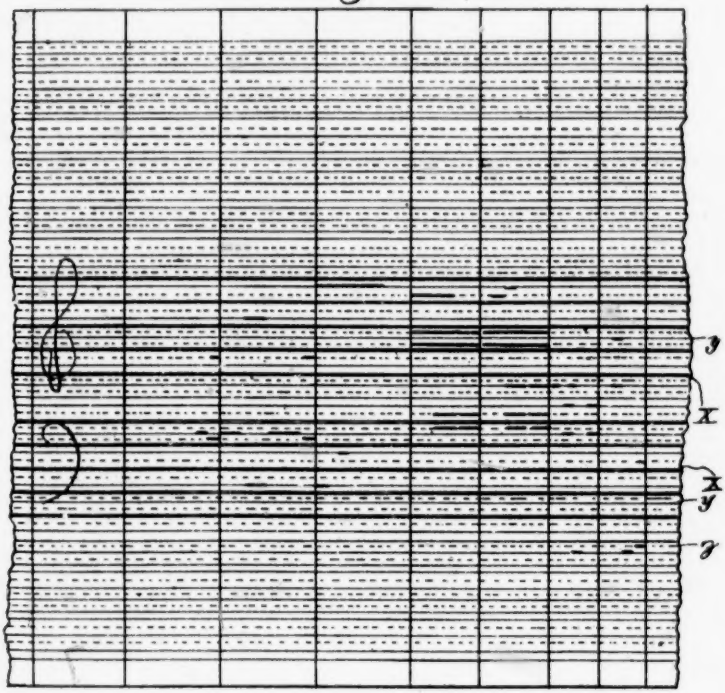
Fig. 5.



Witnesses:
C. F. Wilson
C. E. Hough

Inventor:
Lillian O. Rissman
By Franklin N. Hough

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UNITED STATES PATENT OFFICE.

LILLIAN O. RISSMAN, OF CHICAGO, ILLINOIS.

APPARATUS FOR RECORDING MUSIC.

SPECIFICATION forming part of Letters Patent No. 722,904, dated March 17, 1903.

Application filed December 2, 1902. Serial No. 133,643. (No model.)

To all whom it may concern:

Be it known that I, LILLIAN O. RISSMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Apparatus for Recording Music; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to music-recording apparatus comprising spring-actuated rods which are adapted to be connected to the keys of a piano and type-carrying levers which have connection with said rods, with an inking-ribbon and an intermittently-moving bail-shaped member and means whereby a strip of paper may be transversely printed into bars.

The invention consists, further, in various details of construction, arrangement, and adaptation of parts, as will be hereinafter fully described and then specifically defined in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings similar letters of reference indicate like parts in the views, in which—

Figure 1 is a partial longitudinal sectional view through a keyboard and a front elevation of the device, the front board being removed. Fig. 2 is a vertical sectional view taken on line 2 2 of Fig. 1. Fig. 3 is a horizontal sectional view taken on line 3 3 of Fig. 1. Fig. 4 is a partial end elevation of the device, showing the knob for adjusting the time of the printed music. Fig. 5 is a plan view of a portion of the music-sheet after it has been printed.

Reference now being had to the details of the drawings by letter, A and A' designate, respectively, the white and black keys of a keyboard of a piano, and attached to the frame of the board and underneath same is a casing B, having standards C and C' mounted therein, said standards C supporting the rollers or reels D and D', which are journaled in the standards, the reel D having wound thereon a strip of paper on which the impressions are to be printed and the reel D' carrying wound thereon an ink-ribbon. A suitable crank *d* is fastened to reel D', whereby the ribbon may be wound back upon the reel from a roller *d'*, the pintles of which are journaled in the standards C'. The strip of paper passes from the reel D between two plates E and E', thence passes over a roller F, said strip being fed by frictional contact of a spring-pressed roller G, which holds the paper against the circumference of the roller F. Said roller G is journaled in slots in the standards C', and springs G' serve to hold the roller in frictional contact with the paper, as shown in Fig. 1.

For driving the strip of paper and the ink-ribbon I provide a spring-motor contained within a box H, which drives a gear-wheel I, which is in mesh with a gear-wheel J, fastened to rotate with the reel F. Said gear-wheel J is in mesh with a gear-wheel K, fastened to rotate with the roller G. Fastened to rotate with the shaft of the roller F is a pinion-wheel F', which transmits motion from said shaft to a gear-wheel D^2, mounted to rotate with the reel *d'*, on which the ink-ribbon winds. The gear-wheel D^2 is made somewhat larger in diameter than the other gear-wheel described for the purpose of imparting a slower movement to the ink-ribbon than to the strip of paper.

Pivotally mounted in the ears *e*, which rise from the plate E', are series of levers *e'*, the adjacent free ends of which carry points, each corresponding to a key of the finger-board, and the opposite end of each lever is fastened to a cord L, which passes over a roller L' and is fastened to one end of an angle-lever N, pivoted at N' to the frame of the keyboard. The other end of said angle-lever is connected to a wire M, which is fastened at its upper end to the under face of one of the keys of the keyboard, as shown clearly in Fig. 1 of the drawings. The lower end of each wire M, there being a similar wire fastened to each key, is acted upon by a spring O, which serves to hold the key in its normal position, returning same to its original position after it has been depressed. In Fig. 1 I have shown collars *m* fastened to each wire, the lower ends of the wires passing through apertures in the

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cross-piece m', and a spring is interposed between the latter and the upper of said collars, the collar at the extreme end of the wire being below the piece m', thus limiting the upper movement of the wire.

A rectangular-outlined bar Q is pivotally mounted to the frame on the pins Q' and has one of its edges formed for printing cross-lines on the strip of paper, dividing the strip into measures. Said edge is designated in the drawings by letter q and is positioned adjacent to the point carried at the ends of the levers e'. For tilting said printing-bar Q to effect the printing of the cross-lines dividing the strip into measures, I provide a series of disks R, having each a series of lugs radially disposed about its circumference, the number of lugs varying on the several disks accordingly as it may be desired to print the cross-lines nearer together or farther apart for different times of music. In Fig. 1 I have four lugs about the circumference of the disk R, which will cause the printing edge q to make four impressions on the paper at each revolution of the disk. These disks are mounted to rotate with the shaft R', on which is fastened a pinion-wheel r, that is in mesh with a pinion r' in gear with the wheel G.

Referring to Fig. 3, it will be observed that the several disks R are fastened to a shell R^2, which is splined to the shaft R', and by the provision of a bar S with a knob S' mounted thereon said shell may be moved longitudinally on the shaft R', the inner end of said bar S engaging a groove T in an enlarged portion thereof. Said bar S is pivotally mounted on a shaft V, and a series of notches W is formed in the side of the casing, a detail of which is shown in Fig. 4, in which the bar may rest in adjusting the apparatus to print the cross-lines dividing same into measures nearer together or farther apart, as may be desired, for different times of music. Projecting from the bar Q is an arm Q^3, the free end of which is slightly curved, as shown, and said arm is adapted to rest upon the circumference of one or another of said disks and to be raised by the lugs thereon.

Fig. 5 illustrates a section of a strip of paper which has been printed upon and which has been previously prepared by being ruled longitudinally, the treble and base clef being distinguished by each having five double lines and the characters being printed at intervals along the strip of paper, said double lines being designated by letter X. Between the double lines X of the staff-lines are continuous single lines Y and dotted lines Z, the continuous single lines Y corresponding to the white keys and the dotted lines indicate notes corresponding to the black keys. Above, below, and between the staffs the single continuous and dotted lines are drawn, corresponding with each key of the instrument.

In operation the strip of paper with the ruling described printed thereon is fed between the plates E and E', and when it is desired to cause a character or mark to be printed upon the paper to correspond to a particular note a key is depressed and the point on the end of a lever e', actuated by said lever, will press the ink-ribbon against the strip of paper, and the length of the mark printed will depend upon the length of time the operator holds the key depressed. The strip of paper, as illustrated in Fig. 5, shows at the left of the sheet cross-lines dividing the music into bars of four-four time and to the right of the center into bars of three-four time and to the extreme right still narrower measures of two-four time, these measure-lines being printed by the tilting of the bar Q, before described.

By the provision of an apparatus embodying my invention it will be observed that an improvised piece may be printed upon the strip of paper and readily enabling the operator to reproduce same from the impressions made thereon.

While I have shown a particular construction of apparatus whereby my invention may be carried out, it will be understood that I may make alterations in the detailed construction of the apparatus without departing from the spirit of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A music-recording apparatus, comprising in combination with the keys of the finger-board of a piano, spring-actuated rods fastened to the keys, point-carrying levers and connections between same and said rods, an ink-ribbon and impression-strip and means for feeding the same adjacent to said point-levers, a tilting bail-shaped member, and means for imparting an intermittent movement thereto whereby the impression-strip may be transversely printed into bars, as set forth.

2. A music-recording apparatus, comprising in combination with the keys of the finger-board of a piano, spring-actuated rods connected to said keys, pivotal point-carrying levers, connections between same and said rods, an ink-ribbon and an impression-strip and means for feeding same adjacent to said point-levers, a tilting bail-shaped printing member, a disk having a series of teeth about its circumference, and means for rotating the disk whereby an intermittent movement may be imparted to said bail-shaped member by said teeth, as set forth.

3. A music-recording apparatus, comprising in combination with the keys of the finger-board of a piano, spring-actuated rods fastened to said keys, pivotal point-carrying levers, connections between same and said rods, pivotal bail-shaped printing member having an arm projecting therefrom, a disk having teeth about its periphery and against which said arm is adapted to contact whereby as the disk is rotated an intermittent movement is imparted to said member, and an ink-ribbon and an impression-strip and

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means for feeding same adjacent to said point-carrying levers, as set forth.

4. A music-recording apparatus, comprising in combination with the keys of the finger-board of a piano, spring-actuated rods connected to the keys, tilting point-carrying members and connections between same and said rods, a tilting bail-shaped printing member, an arm projecting therefrom, a plurality of disks having varying numbers of teeth about their peripheries and on which said arm is adapted to rest, and means for shifting said disks in order to bring one or another thereof underneath said arm whereby an intermittent movement may be imparted to said member, an ink-ribbon and an impression-strip and means for feeding same adjacent to said point-levers, as set forth.

5. A music-recording apparatus, comprising in combination with the keys of the finger-board of a piano, spring-actuated rods fastened to said keys, point-carrying levers and connections between same and said rods, a pivotal bail-shaped member, an integral arm projecting from said member, a series of rotatable disks having varying numbers of teeth about their peripheries, a tilting lever adapted to shift said disks to bring any one of said disks in position to impart an intermittent tilting movement to said member, as set forth.

6. In combination with the keys of the finger-board of a piano, tilting point-carrying levers and connections between same and said keys, a casing, a tilting bail-shaped printing member mounted therein and having an integral arm projecting therefrom, a shaft, a sheil splined to said shaft, disks fixed to said shell and having varying numbers of teeth about their circumferences, a pivotal shifting-lever adapted to engage said shell to move the same longitudinally, said casing having a slot with notched teeth in which the shifting-lever is adapted to engage, and an ink-ribbon and impression-strip, and means for feeding the same adjacent to said printing-type, as set forth.

7. In combination with the keys of the finger-board of a piano, a casing, tilting point-carrying levers mounted therein, an ink-ribbon and reels upon which the same are carried an impression-strip, and reels for carrying same, plates mounted in the casing, and means for feeding said ink-ribbon and strip between said plates, a tilting bail-shaped printing member having an integral arm projecting therefrom, a series of disks having varying numbers of teeth about their circumferences, and geared connections with said strip-feeding means for rotating the disks, and a pivotal shifting-lever for throwing one or another of said disks underneath said arm whereby an intermittent movement may be imparted to said bail-shaped member, as set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

LILLIAN O. RISSMAN.

Witnesses:
ROBERT W. STEWART,
JOHN J. CURRAN.

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(No Model.) 2 Sheets—Sheet 1.

J. W. ROBBERSON.

MUSICAL NOTATION.

No. 482,442. Patented Sept. 13, 1892.

Fig. 1.

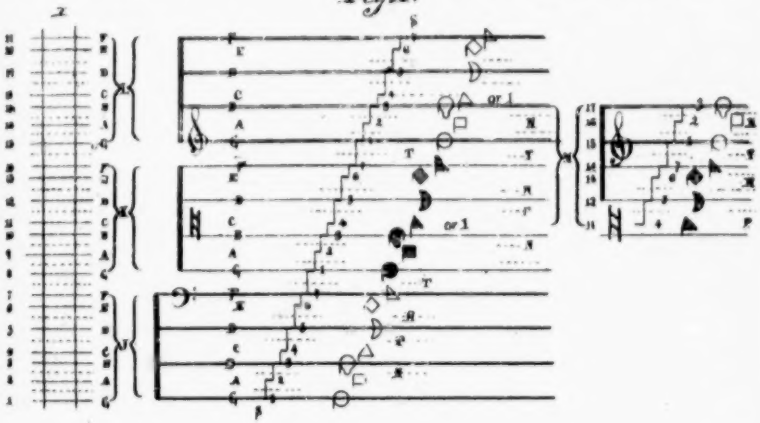
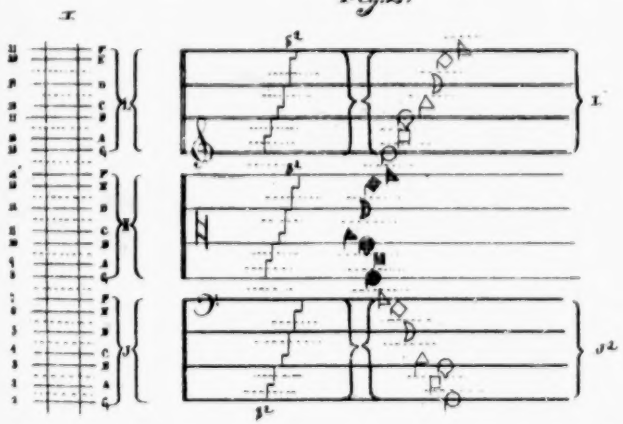


Fig. 2.



John W. Robberson
Inventor.

Witnesses:
Wade Atkins
Henry H. Wooster

Nos. 110 & 111.

W. S. M. P. Co. v. A. Co.

(No Model.) 2 Sheets—Sheet 2.

J. W. ROBBERSON.

MUSICAL NOTATION.

No. 482,442. Patented Sept. 13, 1892.

Fig. 3.

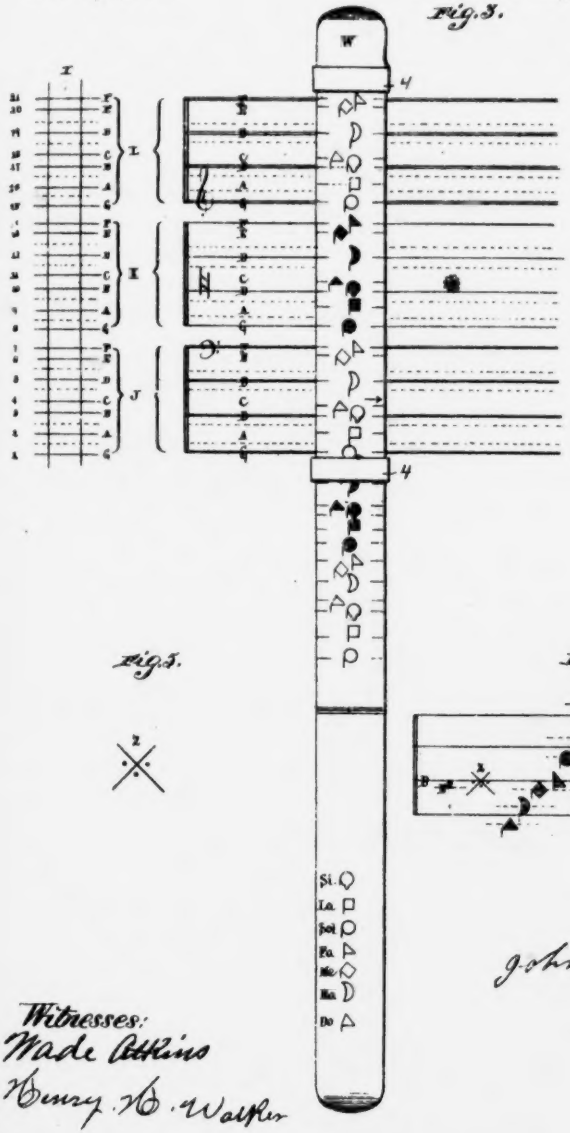
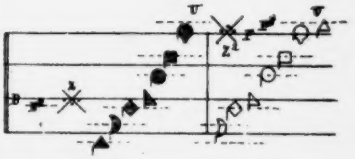


Fig. 5.

Fig. 4.

Witnesses:
Wade Atkins
Henry H. Walker

John W. Robberson
Inventor.

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UNITED STATES PATENT OFFICE.

JOHN W. ROBBERSON, OF BELCHERVILLE, TEXAS.

MUSICAL NOTATION.

SPECIFICATION forming part of Letters Patent No. 482,442, dated September 13, 1892.

Application filed May 19, 1891. Serial No. 393,351. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. ROBBERSON, a citizen of the United States, residing at Belcherville, in the county of Montague and State of Texas, have invented certain new and useful Improvements in Written Music; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in music notation; and it has for its objects to provide a sheet in which the tones in their successive order of degrees by septenaries comprising the limit of the human voice from low to high pitch or from base to treble will be graphically indicated, and also to furnish a means whereby mechanical transposition of the notated characters may be effected, as more fully hereinafter explained.

The above-mentioned objects are attained by the means illustrated in the accompanying drawings, in which—

Figure 1 is a diagram showing my improved notation. Fig. 2 is a diagram showing a modification in which each separate staff is a separate and independent scale of degrees and in which added lines are employed above and below the staff with note characters thereon. Fig. 3 is a diagram of my improved notation, showing the means of transposing the scale in position thereon. Fig. 4 is a diagram of a part of a single staff, showing the repeat character thereon in two positions and in which dotted lines are employed with two scales of note characters thereon; and Fig. 5 represents the repeat character, which is employed when two notes of different pitch are on a single letter of the staff—as, for instance, both F and B-flat.

Referring by letter to said drawings, the letters J, K, L, and M represent the series of four staffs, each embracing a septenary. The base or F-clef staff, forming the lower one of the series, is formed of four heavy lines, as at J; the second, tenor or C-clef staff, of four light lines, as at K; the third, treble or G-clef staff, of four double lines, as at L, and the fourth, alto or C and G clef staff, of two light and two double lines, as at M, as indicated in the drawings, so that each staff may be readily distinguished from the others of the series at a glance. The spaces between the lines of the staffs may be of any suitable dimensions, but of such relation to each other that the second and third spaces C and E will be three-fourths of the width of the first space A. As illustrated in the drawings, if the space A is one-half inch in width, the spaces C and E are three-eighth inch spaces. It is evident that the width of the spaces may be varied so long as the above-named relative proportions are maintained.

In connection with the lines of the staff I employ what I denominate "dotted lines" as signatures of half-steps in position parallel with ledger-lines, and a series of steps and half-steps (indicated by the letter S) in the respective figures. These extend obliquely across the staff from the lower lines to the upper lines thereof from left to right, as indicated, the horizontal portions being on the lines of the staff and intermediate thereof, as shown, the intermediate portions serving to indicate the note characters, which occupy the spaces between the lines in the improved musical notation. The degrees of the staff are numbered in succession from one to seven at the angles of the steps comprising three septenaries or twenty-one tones with intervening half-tones, indicated as flats or sharps by the dotted lines parallel with the ledger-lines and across the major-steps.

In the modification of my invention shown in Fig. 3 of the drawings the body of the notation-sheet is provided with loops 4, through which is passed a vertically-movable notation-slip W. This has printed or otherwise produced upon it characters corresponding to the characters to be represented on the lines and in the spaces of the staffs, and by moving it vertically up or down the characters may be brought into such relation to the lines or spaces or the dotted lines between the degrees of the staffs as to transpose the characterization of the notes in a musical composition mechanically and readily. The note characters are of such dimensions that one note will exactly fill half of the space A or a space equivalent thereto, so that in shifting the transposing-slip W the note characters thereon will assume their proper positions in relation to the lines and spaces and to the

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dotted lines intermediate between the degrees of the staff on the body-sheet.

In connection with the note characters I employ a note character for a repetition, which consists of two crossed lines, as shown in Fig. 5, with their ends of unequal length and having dots near their intersections.

In the modification of my invention shown in Fig. 4 of the drawings the characters indicated by U U having been effected by transposition and brought to bear with the dotted lines therein, of which the notes in the left-hand scale are flatted and the repeat characters indicated by Z in position on second line B, representing both B and B-flat being employed in this scale, and of which the notes in the right-hand scale are sharped and the repeat character inverted and in position on the fourth line F, indicated by Z^3, representing both F and F-sharp being employed in said scale.

Having described my invention, what I claim is—

1. The improved music-sheet having the four staffs graphically indicated, as described, the first in broad heavy lines, the next in light lines, the third in double lines, and the fourth in two light and two double lines, each having spaces of unequal width and dotted lines therein, substantially as specified.

2. The improved music-sheet having the repeat character, consisting of the cross-lines and dots, arranged substantially as set forth.

3. The improved music-sheet having annotated staffs, as described, the first in broad heavy lines, the second in light lines, the third in double lines, and the fourth in two light and two double lines, each having spaces of unequal width and dotted lines in the spaces parallel to the ledger-lines, the fourth being inclosed in the brace connecting the two lower lines of the treble-staff and the two upper lines of the tenor-staff, substantially as specified.

JOHN W. ROBBERSON.

Witnesses:
WADE ATKINS,
WILLIAM T. BIRGE.

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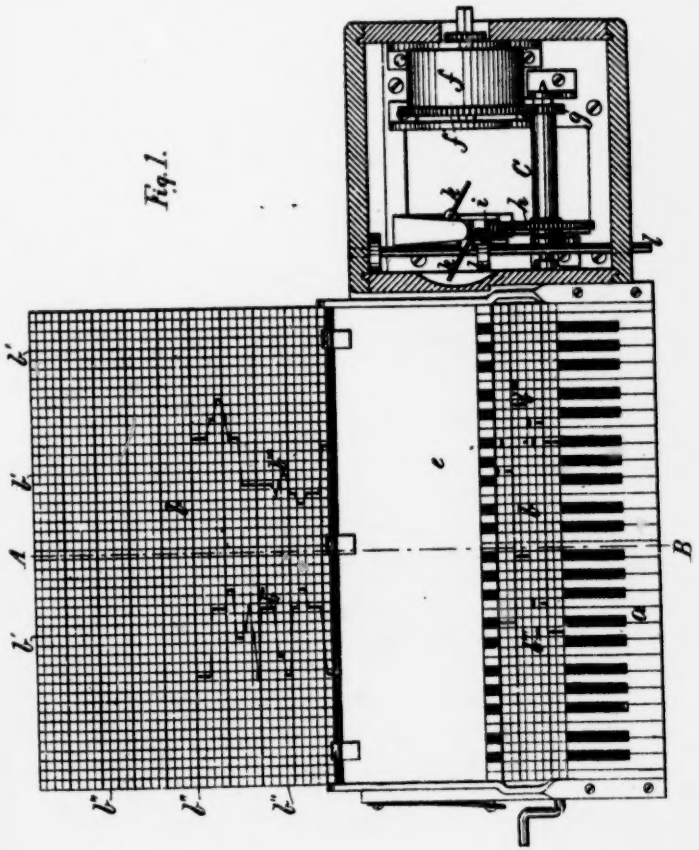
Nos. 110 & 111.
W. S. M. P. Co. v. A. Co.

G. WOODS.
Note-Indicator for Musical-Instruments.

No. 210,888. Patented Dec. 17, 1878.

Fig. 1.



Witnesses:
Henry Chadbourn
Wilkes & Flint

Inventor:
George Woods
by Munn & Co

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Nos. 110 & 111.

W. S. M. P. Co. v. A. Co.

2 Sheets—Sheet 2

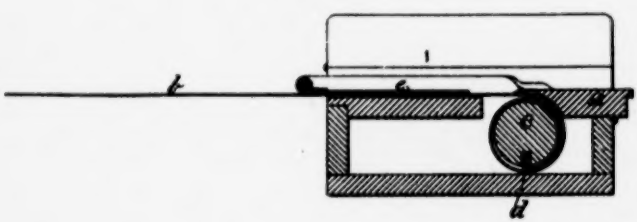
G. WOODS.

Note-Indicator for Musical-Instruments.

No. 210,888. Patented Dec. 17, 1878.

Fig. 3.

Fig. 2.



Witnesses:

Henry Chadbourn.

Willis E. Flint.

Inventor:

George Woods

by Allan Andrews.

his Atty.

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UNITED STATES PATENT OFFICE.

GEORGE WOODS, OF CAMBRIDGEPORT, MASSACHUSETTS.

IMPROVEMENT IN NOTE-INDICATORS FOR MUSICAL INSTRUMENTS.

Specification forming part of Letters Patent No. **210,888**, dated December 17, 1878; application filed March 18, 1878.

To all whom it may concern:

Be it known that I, GEORGE WOODS, of Cambridgeport, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Note-Indicators for Musical Instruments, &c.; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in note-indicators for musical instruments, &c.; and my invention consists of movable sheet-music, in combination with a stationary index or imitation key-board, or ordinary key-board, or vice versa, and suitable mechanism for its operation.

The sheet-music is divided by means of horizontal and vertical bars or lines into fields, squares, or spaces, in which the notes are contained, and the relative position of the said notes on the sheet-music indicates its key on the musical instrument for which it is written, when it is placed in its proper position with the key-board or imitation key-board of the musical instrument, and its size indicates its length or duration during which it is to be sounded. The said bars, lines, or fields on the sheet-music may be dispensed with, and the notes printed in their relative positions on a blank sheet to equal advantage.

To explain this invention and its operation more fully, I will describe it as applied to a piano or organ, although it is equally useful for any and all other musical instruments, as well as for vocal instruction and voice-training and singing.

I will also describe the invention as provided with a stationary index or imitation key-board and movable sheet-music, although a stationary music sheet, combined with a movable index or imitation key-board, may be used to equal advantage for various instruments or purposes, or combined with the ordinary key-board on musical instruments. This stationary index or imitation key-board is made with representations of all the different keys on the instrument, behind which index is located the rotary sheet-music roller, that is set in a rotary motion around its axis by means of any of the ordinary spring or other motors, provided with a suitable regulator, by which the proper speed is maintained, changed, and regulated, as may be desired.

To the music-roll is attached one end of the sheet-music, that is divided in vertical bands or rows in a line with the keys on the index or imitation key-board. The vertical rows on the sheet-music are divided by horizontal lines, colors, or bars in spaces representing units of time—as, for instance, each horizontal field or row or space may represent a full, half, quarter, or more or less of a note, as may be desired.

We will suppose, in the present instance, that the horizontal rows or fields on the sheet-music represent quarter-notes. In that case a note printed on the whole vertical extension of any square would represent that the key opposite has to be held down one-fourth of a full note. If one-half of the field is printed on, it would represent an eighth-note, and so on in proportion. This may also be accomplished by the marks of the notes only on a blank sheet without the aforesaid fields, rows, or spaces.

After the music-roll and sheet-music are set in motion, all that the operator has to do is to put his fingers down on those keys of the instrument that correspond with the representations on the index or imitation key-board as soon as each and any of the marks on the sheet-music approach the front edge of the index, and to retain such keys down till the edge of each mark on the sheet-music disappears behind the front edge of the stationary index.

It is immaterial what kind of marks or figures I use on the sheet-music, or whether the fields be plain or colored, or whether such fields are used at all. One and the same sheet may be used for several different instruments, or for different parts in vocal or instrumental music, by making the notes for each instrument or for each part of vocal music—such as the basso, soprano, &c.—of a distinct or different color, or of a different shape or figure

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from the others. In this case one and the same sheet and one and the same index or imitation key-board can be used for several players or singers at the same time, or both, and thus insure the advantage of all keeping accurate time together. Two or more of these note-indicators may be combined and connected together by suitable mechanism and operated by one and the same motor, so as to give the correct time to each individual player or singer in choirs, schools, orchestras, &c.

On the accompanying drawings, Figure 1 represents a plan view of my improved note-indicator and sheet-music. Fig. 2 represents a cross-section on the line A B, shown in Fig. 1; and Fig. 3 represents a longitudinal section of the rotary music-roller.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

a represents the stationary index or imitation key-board. *b* is the movable sheet-music, one end of which is attached to the rotary roller *c* by means of a dowel, *d*, or otherwise. *e* represents a suitable guard folded down upon the sheet-music, so as to guide it smoothly toward the front edge of the index or imitation key-board *a*. b' b' b' represent the vertical lines or bars or rows on the sheet-music *b*, and b'' b'' b'' represent the horizontal lines, bars, or rows on said sheet-music. b''' b''' b''' represent the note-marks on said sheet-music, the vertical extensions of which note-marks indicate the length of time in which they are to be sounded, and the horizontal positions of which indicate their positions on the music-scale. C represents the driving-shaft for the roller *c*, the latter being provided with a suitable ratchet or coupling, *c'*, so that the said roller may be disconnected from the driving-shaft C when desired, and another roller with new sheet-music connected to said shaft when a new tune or piece of music is to be played.

Any desired mechanism may be used for imparting the proper rotary motion to the roller *c*.

I have in Fig. 1 shown it as consisting of an ordinary spring-case, *f*, cog-wheels *f' g h i*, fan or regulator *k*, and sliding stop *l*, in a similar manner to the mechanism used for operating music-boxes; but I do not attach any importance to this peculiar mechanism, as any of the ordinary ones may be used to equal advantage, as well as such mechanisms as are used on the spring curtain-rollers, &c.

What I wish to secure by Letters Patent, and claim, is—

1. The herein-described note-indicator, consisting of movable sheet-music, *b*, combined with a stationary index or imitation key-board or ordinary key-board, and suitable automatic mechanism for its operation, as and for the purpose set forth.

2. The herein-described sheet-music *b*, provided with note-marks b''' b''', the size of which indicates their relative length or duration, in combination with an imitation key-board, or key-board, as and for the purpose set forth.

3. The herein-described sheet-music *b*, provided with vertical lines, bars, or rows b' b', horizontal lines, bars, or rows b'' b'' b'', and note-marks b''' b''' b''', as and for the purpose set forth.

In testimony that I claim the foregoing as my own invention I have affixed my signature in presence of two witnesses.

GEORGE WOODS.

Witnesses:
ALBAN ANDRÉN,
HENRY CHADBOURN.

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Circuit Court of the United States
South District of New York
Otte - Smith Music Pub. Co
vs
Apollo Company
Complainants Exhibit
Boehm & Juliusberger German Patent
Dec 4, 1893

AUSGEGEBEN DEM 24. SEPTEMBER 1886

KAISERLICHES PATENTAMT.

PATENTSCHRIFT

— № 37081 —

KLASSE 51: Musikalische Instrumente.

PAUL BOEHM und FEDOR JULIUSBERGER in BERLIN.

Neuerung an Vorrichtungen zum selbstthätigen Aufzeichnen gespielter Musikstücke.

Patentirt im Deutschen Reiche vom 13. November 1885 ab.

Vorliegender Apparat an Tasteninstrumenten bezweckt, die Töne eines gespielten Musikstückes selbstthätig zur graphischen Darstellung zu bringen, und zwar derart, dafs diese Aufzeichnung sowohl in Bezug auf den Werth jeder einzelnen Note correct und übersichtlich ist, als auch zur späteren Uebertragung in die übliche Notenschrift benutzt werden kann. Durch die graphische Reproduction eines Musikstückes ist diese Vorrichtung nicht allein für Componisten behufs Aufzeichnung freier Phantasien von Wichtigkeit, sondern auch für Lehrer, welchen nunmehr ermöglicht ist, das ihren Zöglingen zur Uebung aufgegebene Musikstück wie eine schriftliche Arbeit zu corrigiren, ohne dafs die persönliche Anwesenheit des Lehrers beim Spielen erforderlich wäre.

Auf beiliegender Zeichnung zeigt Fig. 1 den Querschnitt der Vorrichtung, Fig. 2 den Grundrifs und Fig. 3 einen Längenschnitt nach *x-x* der Fig. 2.

Fig. 4 ist die Ansicht der graphischen Darstellung eines gespielten Musikstückes, Fig. 5 die Uebertragung des in Fig. 4 aufgezeichneten Musikstückes in die bekannte Notenschrift, Fig. 6 Ansicht des Markirstiftes, Fig. 6a Längenschnitt der Fig. 6, Fig. 6b Querschnitt nach *y-y* der Fig. 6.

An jeder einzelnen Taste des Instrumentes ist ein Markirstift *S* angeordnet. Beim Anschlag einer Taste wird dieser Markirstift gegen eine sich gleichmäfsig abwickelnde Papierfläche gedrückt und hierdurch die Lage dieser Taste, also der Ton in Bezug auf seine Höhe auf dem der Klaviatur entsprechenden liniirten Papier aufgezeichnet, während der Werth der Note, also die Dauer des Tones durch die entsprechende Länge oder Kürze des Striches markirt wird.

In der graphischen Darstellung, deren Unterlage der bekannten Anordnung von weifsen und schwarzen Tasten an klavierähnlichen Instrumenten entspricht, erscheinen nun die gleichzeitig angeschlagenen Tasten, bezw. der Beginn der gleichzeitig erklingenden Töne in einer geraden (horizontalen) Linie, weil die Markirstifte, wie Fig. 2 zeigt, ebenfalls in einer geraden Linie angeordnet sind. Diese Markirstifte müssen jedoch, um bei jedem beliebigen Anschlage, sei derselbe ein starker oder weicher, stets sicher zu functioniren, in sich federnd wirken, damit bei einem starken Anschlage das Papier nicht beschädigt werde.

Der in Fig. 6, 6a und 6b in gröfserem Mafsstabe dargestellte Markirstift *S* besteht aus einer Hülse *a*, in deren oberem Theil die Holzschraube *b* befindlich ist. Innerhalb dieser Hülse *a* ist eine zweite, den eigentlichen Markirstift (Bleistift) *c* aufnehmende Hülse *d* mit einer Schraubenfeder *s* angeordnet, wobei der in *d* befestigte und in einem Schlitz a^1 der Hülse *a* gleitende Stift *e* die Abwärtsbewegung des Schreibstiftes begrenzt.

Unterhalb der Markirstifte *S*, welche vermittelst der bereits erwähnten Schrauben *b* in die untere Fläche je einer Taste angeschraubt werden, befindet sich die Reproductionswalze *W*, auf welche das für die graphische Darstellung bestimmte Papier *P* aufgewickelt ist.

Die gleichmäfsige Abwickelung des Papieres von der Walze *W* auf die Aufnahmewalze W^1 während des Spielens erfolgt in bekannter

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Weise durch ein Uhrwerk. z. B. durch die Federtrommel f mit Getriebe $g\,g^1\,g^2$. Eine beliebige Arretirvorrichtung verhindert das unbeabsichtigte Ablaufen des Uhrwerkes bezw. das Abwickeln des Papieres von der Walze W. Beim Beginn des Spielens wird diese Arretirvorrichtung ausgelöst und nach Beendigung des Musikstückes wieder eingestellt. Zur Führung des abzuwickelnden Papieres dient die Welle r.

Die Reproductionswelle W ist verstellbar, um dieselbe auch außer Berührung mit den Markirstiften bringen zu können, wenn eine Aufzeichnung des Musikstückes nicht stattfinden soll.

Das die graphische Darstellung aufnehmende Papier ist analog dem äußeren Ansehen der schwarz-weißen Klaviatur (im Grundriß) vertical gestr[illegible] um das Ablesen der in Strichen aufgezeichneten Noten in Bezug auf ihre Höhe bezw. Tiefe zu erleichtern, Fig. 4. Zu gleichem Zwecke sind in Intervallen die Bezeichnungen für die Töne (c, cis, d, dis ...) aufgedruckt. Die horizontale Liniatur dieses Papieres erleichtert das Ablesen der Noten in Bezug auf ihre Dauer und Reihenfolge.

In Fig. 3 ist der C-dur-Accord kurz angeschlagen und auf der ersten horizontalen Linie der Fig. 4 derselben graphisch aufgezeichnet.

Fig. 4 veranschaulicht die graphische Darstellung der ersten 3 Tacte der Sonate No. 3, Op. 2, L. v. Beethoven, welche in das bekannte Notensystem durch Fig. 5 von der in Fig. 4 dargestellten Aufzeichnung umgeschrieben ist. Fig. 4 ist jedoch wegen Raummangels 2 Octaven tiefer gezeichnet.

Man ersieht hieraus, daß die ganzen Noten im Baß (erster Tact) in den entsprechenden verticalen Rubriken c und g lang gezogene Linien sind (jedoch 2 Octaven höher gedacht), während die Sechszehntel-Noten in der zweiten Hälfte des ersten Tactes nur als lang gezogene Punkte erscheinen etc.

Aus dieser graphischen Darstellung ist nun mit Leichtigkeit das gespielte Musikstück, z. B. eine direct auf dem Instrument vorgetragene, noch nicht zu Papier gebrachte Composition oder Phantasie, in das bekannte Notensystem umzuschreiben, wenn diese Composition veröffentlicht werden soll.

Die beschriebene Vorrichtung kann auch am hinteren Ende der Klaviatur analog angeordnet werden, und können die Markirstifte mittelst Zwischenhebel oder einer ähnlichen Construction gegen die Papierwalze gedrückt werden. Ein seitliches Verschieben des Papieres P auf der Welle W wird durch Bunde oder Scheiben an den Enden der Welle verhindert.

Schließlich sei noch erwähnt, daß auch durch eine Verlängerung der Markirstifte, convergirend nach der Mitte der Klaviatur geführt, eine kürzere Reproductionswalze W zur Verwendung kommen kann, um das Ablesen der graphischen Darstellung zu erleichtern.

Patent-Ansprüche:

An Vorrichtungen für Tasteninstrumente zur selbstthätigen graphischen Darstellung eines Musikstückes während des Spielens die unmittelbare Befestigung der Markirstifte S an den Tasten des Instrumentes, zum Zwecke, die Töne des gespielten Stückes in Bezug auf ihre Höhenlage und Dauer sowie Reihenfolge graphisch aufzuzeichnen.

PAUL B

Neuerung an V

Fig. 1.

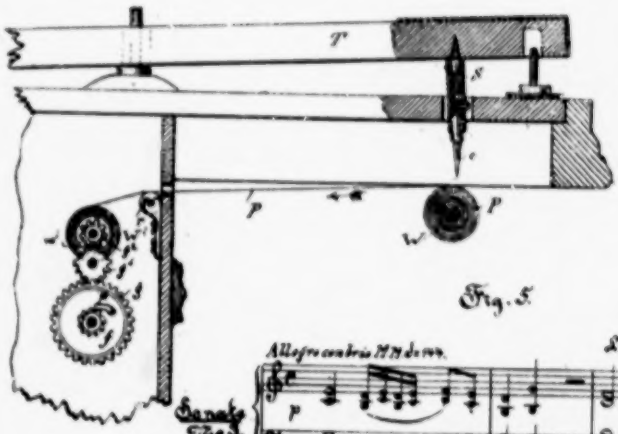


Fig. 2.

PAUL BOEHM UND FEDOR JULIUSBERGER IN BERLIN.

Neuerung an Vorrichtungen zum selbstthätigen Aufzeichnen gespielter Musikstücke.

Fig. 2.

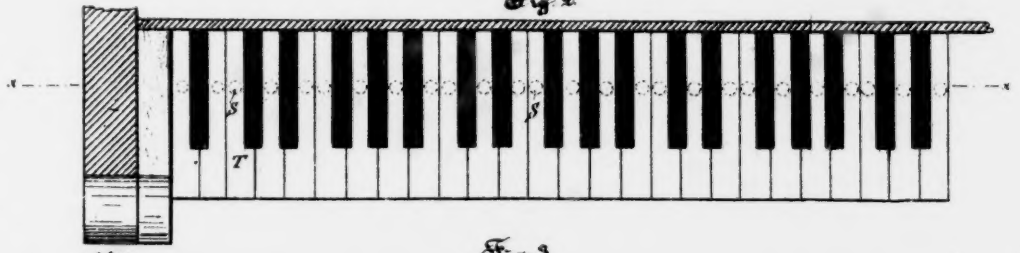



Fig. 3.

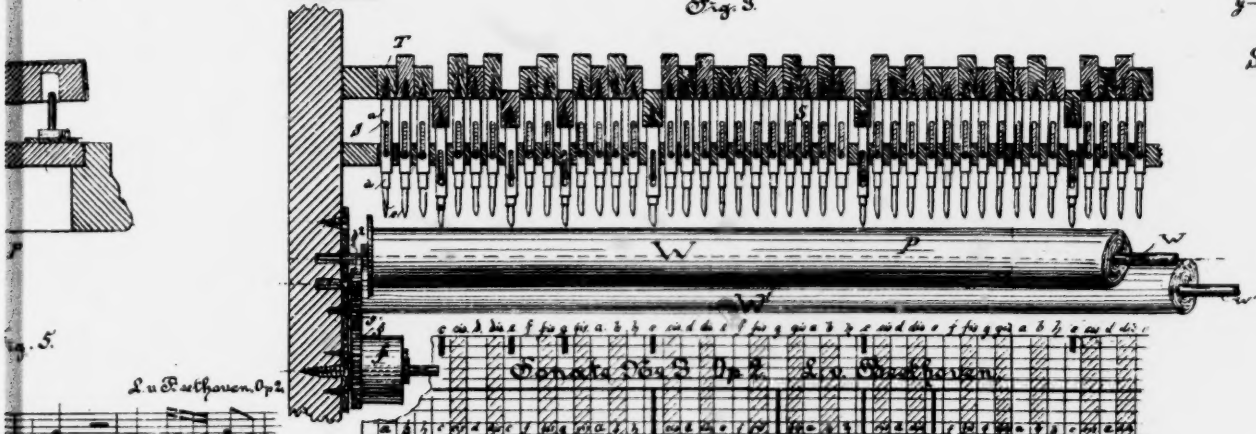


Fig. 4.

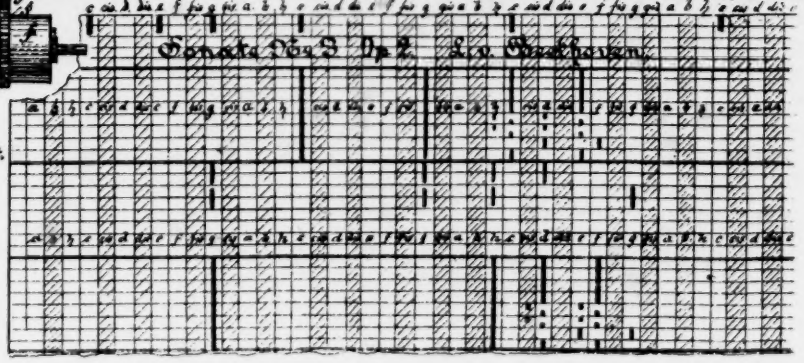


Fig. 5.

Fig. 6.

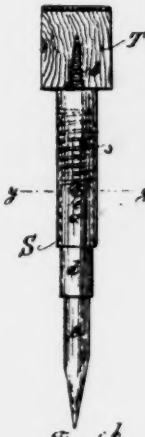
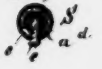


Fig. 6a.

Fig. 6b.



Zu der Patentschrift

№ 37081.

PHOTOGR. DRUCK DER REICHSDRUCKEREI.

379 COMPLAINANT'S EXHIBIT TRANSLATION OF BOEHM AND JULIUSBERGER GERMAN PATENT.

German Patent No. 37081.

Class 51. Musical Instruments.

Paul Boehm and Fedor Juliusberger, of Berlin.

Improvements in Devices for Automatically Recording Musical Pieces as They are Played.

Issued Sept. 24, 1886.

Patented in the German Empire from Nov. 13, 1885, on.

The present apparatus, to be used on key musical instruments, has for its object to produce automatically a graphic representation of the notes of the piece played, in such a manner that the representation of each individual note is clear and exact, in relation to the value of each note, and can be used for subsequent transposition into ordinary staff notation.

By graphically reproducing the piece played, composers are not only able to obtain a tone record of their compositions, which is of importance, and piano teachers can correct the pieces which their pupils play for exercise, in the same manner as ordinary writing exercises, without requiring the personal attendance of the teacher during the playing.

In the acompanying drawings

Fig. 1 is a cross section of the device,

Fig 2 a plan view and

380 Fig. 3 a longitudinal section on the line *x x*, Fig. 2.

Fig. 4 is a graphic representation of a musical piece that has been played.

Fig. 5 is the same piece in ordinary staff notation.

Fig. 6 is a view of the marking pin.

Fig 6*a* is a longitudinal section of Fig. 5.

Fig. 6*b* is a cross section on the line *y y* of Fig. 6.

On each key of the instrument a marking pin S is provided. When the key is struck its marking pin is pressed against a suitably uniformly moving sheet of paper and thus a mark is produced which shows the position of the note that is, the note as to its musical value, and the time value of the note, that its length is indicated by the greater or less length of the mark produced.

In the graphic representation which is produced on paper ruled to correspond with the black and white keys of key struck instruments, the keys at the same time, that is the notes sounded at the same time appear on a straight horizontal line, as the several marking pins are also arranged on a straight line as shown in Fig. 2. These marking pins must however be made yielding or elastic, so that every time a key is struck, whether with greater or less force, they will operate and will not injure the paper when struck very powerfully.

The marking pin S shown on an enlarged scale in Fig. 6, 6*a* and 6*b*, consist of a casing *a*, the upper part of which contains the wood screw *b*. This casing contains a sleeve *d* in which the marking pin proper *c* (a lead pencil) is secured. The casing *a* contains a helical spring *s* and a pin *e*, is secured to the sleeve *d* and movable in the

slot a^1 of the casting, a limits the downward movement of the marking pencil c.

Beneath the marking pins S, which by means of the above
381 mentioned screws b are screwed to the bottom of the keys, the reproducing roller W is located upon which the paper P for receiving the graphic representation is wound.

The uniform unwinding of the paper from the roller W upon the take up roller W^1, during playing, is accomplished in the well known manner by means of a clockwork, for example, by means of a spring drum f, with gearing g, g^1, g^2. A suitable stop device prevents undue running down of the clockwork, that is, the undue unwinding of the sheet from the roller W. At the beginning of the playing this stop device is disengaged and at the end of the piece it is engaged. The roller r serves for guiding the sheet as it is unwound. The reproducing roller W is made adjustable so as to bring it out of contact with the marking pins, whenever a record of the piece played is not desired.

The sheet for receiving the graphic representation is ruled analogous to the outer appearance, in plan view, of an ordinary black and white keyboard for the purpose of facilitating the reading of the recorded notes, as to their musical value (pitch). See Fig. 4.

For the same purposes the designations of the notes are printed on the sheet (c-c sharp, d-d sharp, etc.). The horizontal ruling of this sheet facilitates reading the notes in relation to their time value and succession. In Fig. 3 the C major chord is represented as struck sharply and on the first horizontal line of Fig 4 it is represented graphically.

Fig. 4 represents the graphic record of the first three bars of Sonata No. 3, Op. 2, L. v. Beethoven, which are represented in Fig. 5 in staff notation as transposed from the record shown in Fig. 4. On account of lack of space Fig. 4 is represented two octaves lower.
382 It appears from the same the full notes in the bass (first bar) are represented in the corresponding spaces c and g by long drawn lines (however, two octaves higher), whereas the sixteenth notes in the second half of the first bar appear only as extended dots. From this graphic representation, the piece played, for example, a composition of phantasy played directly on the piano and not therefore written, can readily be transposed into ordinary staff notation, if the composition is to be published. The described device can also be arranged at the rear ends of the keys, in a similar manner, and the marking pins can be pressed by intermediary levers or similar devices upon the sheet.

Lateral shifting of the sheet P on the roller W can be prevented by end disks on the shaft. Finally, is should be noted that by lengthening the marking pins and converging them toward the center of the keyboard a shorter reproducing roll W can be used, thus facilitating the reading of the graphic representation.

Claim.

An attachment for key instruments for automatically producing a graphic representation of a piece while playing, having the marking pins S attached directly to the keys for the purpose of marking the notes of the piece played as to their time and musical value and their succession.

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...e. 4, 1903

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KAISERLICHES PATENTAMT.

AUSGEGEBEN DEN 12. JUNI

PATENTSCHRIFT

— № 13928 —

KLASSE 51: MUSIKALISCHE INSTRUMENTE.

RUDOLF WILHELM KURKA IN WIEN.

Apparat zur Notirung der auf Tasten-Musikinstrumenten gespielten Töne mit Anwendung des Elektromagnetismus.

Patentirt im Deutschen Reiche vom 13. October 1880 ab.

Der Zweck dieses Apparates besteht in der Ermöglichung, auf Tasten-Musikinstrumenten gespielte Töne bei Vermeidung störender Nebengeräusche und ohne erforderliche Bedienung des Mechanismus während des Spielens genau und zuverlässig aufgezeichnet zu erhalten.

Der Apparat besteht aus: dem Tastenwerk, der Notirvorrichtung mit der elektrischen Leitung und dem Uebersetzungslineal.

Das Tastenwerk. Fig. 1.

Das Tastenwerk des Notirapparates, welches direct unter der Klaviatur befestigt wird und mit letzterer im Ruhezustande in keinerlei Berührung kommt, besteht aus einem Holzkasten *f*, dessen Deckel so viele runde und mit Tuch gefütterte Löcher besitzt, als auf der Klaviatur Tasten vorhanden sind. Durch diese Löcher ragen kleine, in der Länge verstellbare Holzklötzchen *g*, deren oberstes Ende gleichfalls betucht ist, heraus. Dieselben können durch die Tasten abwärts und durch Federn *h* wieder aufwärts bewegt werden. Die Federn sind aus einem guten Elektricitätsleiter (Metall) verfertigt und an ihren beiden Enden O-förmig gebogen; direct unter jeder Feder *h* befindet sich eine zweite Feder *h'*, welche der ersteren in Form und Bewegungsrichtung gleich, im Ruhestande aber vollständig isolirt ist. Beide Federn besitzen an ihren hinteren Enden elektrische Leitungsdrähte *i i'*, welche durch die an der äußeren Fläche der Verkleidung angebrachten Klemmschrauben *k k'* verlängert werden können. Die Lage der Federn gegen einander wird durch die Klötzchen *l l'* bestimmt. Statt der Feder *h'* ist absichtlich kein feststehender Körper angeordnet, weil hierdurch die Spielart des Instrumentes leicht beeinträchtigt werden könnte.

Diese ganze Vorrichtung wird unter der Klaviatur derart angebracht, daß die Holzklötzchen unter die Tasten, und zwar ungefähr 150 mm vom Waagebalken der Klaviatur nach vorn zu entfernt, gepaßt werden und ein Raum von ca. 3 mm zwischen Klötzchen und Tasten bleibt. Bei Instrumenten mit Klaviaturverschiebung ist es nothwendig, darauf zu achten, daß die Klötzchen nicht genau unter die Mitte der Tasten gestellt werden, sondern mehr auf die rechte Seite, damit sie nicht mit den Nachbartasten in Berührung kommen können.

Der freie Raum zwischen Tasten und Klötzchen hat den doppelten Zweck:

1. die Spielart des Instrumentes nicht wesentlich zu erschweren (weshalb der Angriffspunkt auch dem Waagebalken möglichst nahe zu legen ist), vielmehr den Augenblick des Schwererspielens einer Taste erst am Ende seines Niederganges eintreten zu lassen, mithin am wenigsten dem Spieler fühlbar zu machen;

2. vorzubeugen, daß der Ton eher durch die Notirvorrichtung markirt werde, als er wirklich angegeben wurde. Es kommt nämlich bei schwierigen und weiten Griffen häufig vor, daß man mit freien Fingern oder der inneren Handfläche oft Nebentasten, die gar nicht angegeben werden sollen, leicht berührt und etwas niederdrückt, wodurch am Instrument die betreffen-

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den Töne allerdings nicht hörbar werden. Bei dichter Unterstellung des Tastenwerkes würde aber die Notirvorrichtung diese Töne als gespielt anzeigen und dadurch grofse Verwirrung anrichten.

Um das Tastenwerk mit der Klaviatur zu verbinden, mufs in den Klaviaturboden ein Ausschnitt gemacht werden, damit die Klaviatur mit ihrer unteren Fläche den Klötzchen vollkommen zugänglich wird.

Die Notirvorrichtung. Fig. 2.

Die Construction der Notirvorrichtung ist in den wesentlichsten Punkten jener der Schreibapparate des Morse'schen Drucktelegraphen entnommen.

Ein durch Gewichte getriebenes Laufwerk überträgt durch dessen Trommel seine Bewegung auf eine Walze *a*, welche mittelst Friction eine gegen dieselbe durch Federkraft gedrückte zweite Walze a' in entgegengesetzter Richtung dreht. Diese zweite Walze enthält an ihrer Mantelfläche senkrecht gegen ihre Axe laufende Einschnitte, und zwar genau so viele, als durch die Notirvorrichtung Töne des Musikinstrumentes angegeben werden sollen, und zieht während des Ganges ein an Breite der Walzenlänge entsprechendes Blatt Papier *b* über ihren Mantel. Unter der Walze befindet sich je einem Einschnitt gegenüber ein Stift *c*, welcher an dem einen Ende eines in der Mitte drehbaren Hebels *d* befestigt ist, während am entgegengesetzten Hebelende ein Stück weiches Eisen *e* angebracht wird, welches genau über dem Pol eines Elektromagneten ff' schwebt und beim Schliefsen des Stromes, von jenem angezogen, den Stift gegen den Einschnitt der Walze preſst und in das dazwischen liegende, durch das Uhrwerk gleichmäfsig fortbewegte Papier einen Punkt bei kurzer Berührung (beim Staccatospiel), oder einem dem Werthe der Noten genau entsprechenden, längeren oder kürzeren Strich markirt. Hört der Strom auf, so zieht eine gleichfalls an diesem Hebel angebrachte Feder *g* denselben in entgegengesetzter Richtung vom Elektromagneten ab und der Stift kommt in seine ursprüngliche Lage. Der Gang des ganzen Hebels wird ferner noch durch die Schrauben $h\,h'$ geregelt. *A*, Fig. 2, zeigt diese Anordnung im Querschnitt.

Verbindet man nun den positiven Pol *i* einer gewöhnlichen elektrischen Batterie *B*, Fig. 2, mit sogenanntem Arbeitsstrom (z. B. Leclanché's Braunsteinelemente oder dergl.) durch einen Leitungsdraht mit den rückwärtigen Enden sämmtlicher im Tastenwerk *C*, Fig. 2, oben liegender Federn *k*, hingegen den negativen Pol *m* mit den positiven Polen *l* der gesammten Elektromagnete der Notirvorrichtung A', Fig. 2, und endlich die Enden der im Tastenwerk unten liegenden Federn *n* mit den entsprechenden negativen Polen *o* der Elektromagnete, so wird im Ruhezustande kein Strom, folglich auch keine Anziehung eines der Anker möglich sein. Wird eine der Tasten und gleichzeitig durch Vermittelung des Klötzchens die zugehörige obere Feder niedergedrückt, so berührt sie die darunter liegende, der Strom ist geschlossen, der Anker wird angezogen und bleibt so lange in dieser Stellung, und mit ihm der gegen das Papier gedrückte Stift, bis der Strom unterbrochen wird, d. h. bis die beiden Federn wieder getrennt werden bezw. die Taste sich wieder nach oben bewegt. $p\,p'$ sind Vereinigungskästen für die Leitungsdrähte.

Aus Vorgesagtem läfst sich ersehen, dafs der Apparat mit der gröfsten Genauigkeit alles Gespielte aufzeichnen mufs. Eine ganze Note (vergl. *P*, Fig. 3) wird sich durch einen viermal so langen Strich kennzeichnen, wie eine Viertelnote, letztere mufs sich zweimal so lang darstellen, als eine Achtelnote u. s. w. Accorde, sofern deren Töne gleichzeitig angeschlagen wurden, müssen sich in einer Linie stehend und, wenn gleich lange gehalten, auch in ihrem Verhältnifs zu einander gleichwerthig markiren. Die Bedienung des Apparates besteht nur in der Befestigung der Papierrolle, Aufziehen des Uhrwerkes, und beim Gebrauch Ingangsetzen des letzteren. Da der Leitungsdraht für den elektrischen Strom beliebig lang (natürlich der Kraft der Batterie entsprechend) genommen werden kann, so erhellt daraus die Möglichkeit, die etwas geräuschvoll arbeitende Notirvorrichtung in einem von dem Musikraum entfernten Gemach aufstellen zu können. Die Arbeitsdauer des Apparates, sowie eine Papierrolle zu demselben ist auf mehrere Stunden zu berechnen, und aufserdem eine Vorrichtung anzubringen, mittelst welcher der Apparat seine Ablaufzeit bei Eintritt derselben signalisirt.

Das Uebersetzungslineal.

Der breite Papierstreifen *P*, Fig. 3, wie ihn die Notirvorrichtung nach dem Gebrauch entläfst, ist mit einer grofsen Zahl Punkte und Striche besäet. Das Vorliegende in die gebräuchliche Notenschreibweise übertragen zu helfen, ist die Aufgabe des Uebertragungslineals. Dasselbe ist in Fig. 3 bei *x* im Umfange von $3\frac{1}{4}$ Octaven dargestellt. Es ist mit derselben Theilung versehen, nach welcher die Stifte der Notirvorrichtung befestigt sind, und die Töne der Obertasten werden durch Verschiedenheit der Farbe von jenen der Untertasten kenntlich gemacht. Zur schnellen Orientirung für den Uebersetzenden über die Höhen- und Tiefenlagen der einzelnen Octaven wird seitens der Notirvorrichtung auf dem Papierstreifen die angenommene und übliche Grenze zwischen Violin- und Bafsschlüssel in der Höhe des eingestrichenen c markirt, Fig. 3, $z\,z'$. Behufs Ueber-

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setzung wird das Lineal derart auf den Papierstreifen gelegt, dafs die Markirungslinie des eingestrichenen c genau unter dem betreffenden, auf dem Lineal gleichnamig vermerkten Punkt Platz findet und diesen Platz behauptet. Durch Verschiebung des Lineals in derselben Richtung, wie solche von dem Papierstreifen in der Notirvorrichtung zurückgelegt wurde, oder auch durch Befestigung des Lineals an der Notirvorrichtung selbst und abermaliges Passiren des Papiers durch die Walzen derselben, läfst sich die Zeichenschrift leicht in die gebräuchliche Notenschrift überführen. Alle Noten, welche mit dem Lineal eine Richtung besitzen, wurden gleichzeitig angeschlagen und so lange gehalten, als durch die Länge der Striche angedeutet ist.

Das Tastenwerk wie die Notirvorrichtung bestehen aus so vielen einzelnen, selbstständig arbeitenden Theilen, als Töne des Musikinstrumentes innerhalb der Klaviaturgrenze im Apparat vertreten sein sollen.

Die Wahl des Laufwerkes und der Batterie sowie die Ausstattung und äufsere Form der Umhüllungen sind beliebig.

Patent-Anspruch:

Der dargestellte Apparat zur Notirung der auf Tasten-Musikinstrumenten gespielten Töne, welcher gekennzeichnet ist durch das in Fig. 1 in dem Kasten *f* angeordnete, unter dem Klaviaturboden angebrachte Tastenwerk mit den Tasten *g*, den Contactfedern *h h'* und den Regulirklötzchen *l l'*, den Leitungsdrähten *i i'* und den Klemmschrauben *k k'*, in Verbindung mit der dem Schreibeapparat des Morse'schen Drucktelegraphen nachgebildeten Notirvorrichtung und dem Uebersetzungslineal *x*, mittelst dessen die durch den Apparat gemachten Zeichen abgelesen werden können.

Hierzu 1 Blatt Zeichnungen.

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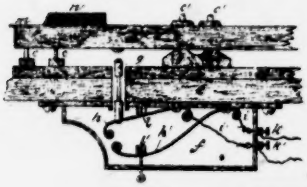
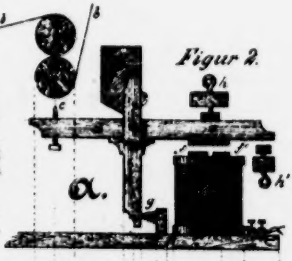
RUDOLF WILHELM KURKA IN WIEN.

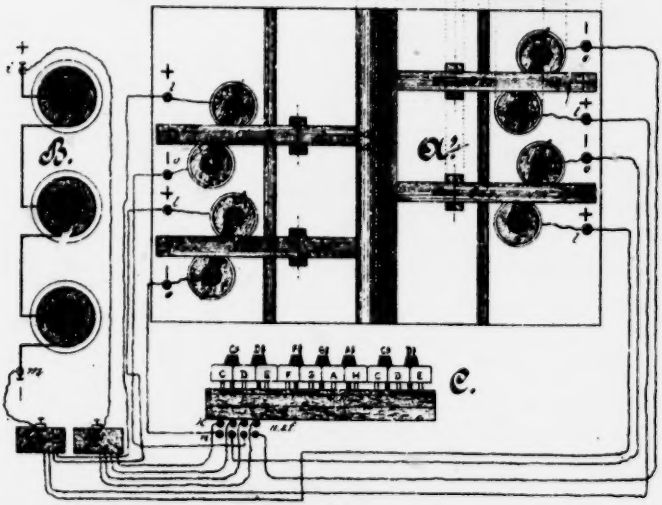
pparat zur Notirung der auf Tasten-Musikinstrumenten gespielten Töne mit Anwendung des Elektromagnetismus.

Figur 1.

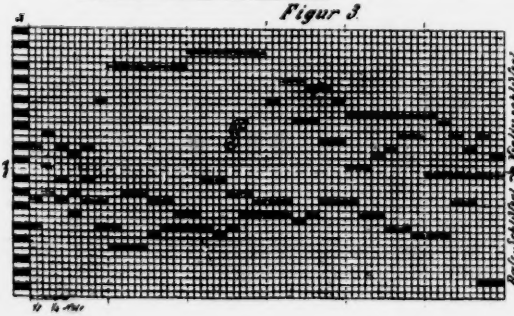


Figur 2.





Figur 3.



Back: Fuge III a 3
Tact 55 bis 60.

Zu der Patentschrift

№ 13928.

PHOTOGR. DRUCK DER REICHSDRUCKEREI.

388 COMPLAINANT'S EXHIBIT TRANSLATION OF KURKA GERMAN PATENT.

German Patent No. 13928.

Class 51. Musical Instruments.

Rudolf Wilhelm Kurka, at Vienna.

Apparatus for Recording, by use of Electro-magnetism, the Notes Played on Key Musical Instruments.

Issued July 12, 1881.

Patented in the German Empire from the 13th Oct., 1880.

The object of this apparatus is to render it possible to exactly and reliably record, while playing, the notes produced on a key musical instrument without any disturbing contributory noises, and with- requiring any special manipulation of the apparatus.

The apparatus consists of the Key mechanism, the Recording mechanism with electric conductors and a translating rule.

The Key Mechanism, Fig. 1.

The key mechanism of the recording apparatus, which is secured directly beneath the keyboard, and when not in actual use does not come in contact with the keyboard, consists of a wooden box *f*, the cover of which is provided with as many cloth-lined round holes as there are keys in the keyboard.

Through these holes small wooden blocks *g* extend, which are movable lengthwise and the upper ends of which are also covered with cloth.

389 The same can be moved downwards by the keys and upwards by springs *h*. These springs are made of a good conductor of electricity (metal) and bent O shaped at their two ends. Directly beneath each spring *h*, there is a second spring h^1 which is shaped like the first and moves in the same manner, but when at rest is insulated completely from the other. Both springs are connected at their fixed ends with electric conducting wires *i* i^1 which can be extended by means of binding posts *k* k^1 on the outer surface of the surrounding casing.

The location of these springs in relation to each other is determined by the blocks *l* l^1.

A fixed body was intentionally not used in place of the spring h^1, as thereby the playing of the instrument might be interfered with. This entire device is placed beneath the keyboard in such a manner that the wooden blocks are fitted under the keys about 150 *m m* from the fulcrum bar of the key, toward the front, and a distance of 3 *m m* remains between the keys and the blocks. In pianos with

laterally shiftable keys, care must be taken not to have the blocks exactly centrally beneath the keys but further to the right side, so that they cannot contact with the adjacent keys. The free space between the keys and blocks is provided for the following purposes:

1. So as not to increase the resistance in playing, for which purpose the blocks are arranged as closely to the fulcrum bar as possible, and thus produce the greatest resistance of the key, at the end of its descent, so that it will be noticed least by the player.

2. To prevent recording the note by the recording mechanism before the tone is actually produced. It happens frequently that in difficult and extended fingering, the disengaged fingers or the inner surface of the hand slightly touch and depress keys, which are not to be played at all, and the corresponding notes are not produced audibly.

390 If the key mechanism were placed more closely to the key such notes would be recorded as having been played and would thus cause great confusion. To connect the key mechanism with the keyboard a recess must be cut in the keyboard bottom, so that the undersides of the keys can fully contact with the blocks.

The Recording Device, Fig. 2.

The construction of the recording device is taken essentially from the construction of the Morse receiver. A motor operated by a weight, transmits motion by means of its drum, to a roller a, which by friction drives in opposite direction a roller a^1 pressed against it by a spring. This second roller is provided in its circumferential face with grooves at right angles to the axis of the roller and of these there are exactly as many as different notes are to be recorded by the recording instrument and this roller draws, during operation, a sheet of paper b as wide as the roller is long over its circumferential face.

Beneath the roller a pin c is located at each circumferential groove which pin is mounted in the end of a centrally pivoted lever d which lever carries at its opposite end a piece of soft iron, which is exactly over the pole end of an electro magnet f f^1 and when the circuit is closed is attracted by the electro magnet and presses the pin into a groove in the roller and produces on the paper between the pin and the roller, and moved uniformly by the clockwork, a dot for a short contact (Staccato playing) or a longer or shorter line corresponding exactly to the time value of the note. As soon as the circuit is broken, a spring g connected with the lever, pulls the same in opposite direction from the magnet and the pin resumes its original position. The movements of the lever are controlled by the screws h h^1.

391 A Fig. 2 shows this arrangement in cross section. If the positive terminal i of an ordinary electric battery B Fig. 2 with a so called working current (for example a Leclanche, Manganese battery, etc.), is connected by a conductive wire with the rear ends of all upper springs k in the key mechanism C Fig. 2 and the negative battery terminal m is connected with the positive terminals

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l of all electro magnets in the note recording mechanism A^1 Fig. 2, and finally the ends of the lower springs *u* in the key mechanism are connected with the corresponding negative terminals e^o, of the electro magnets, no circuits will be closed in the position of rest and no armature will be attracted.

If any key and with it by means of the corresponding block the corresponding upper spring is depressed, it contacts with the spring below, a circuit is closed, the corresponding armature is attracted and remains in this position with its point pressed against the paper until the circuit is broken, that is, until the two springs are separated, respectively one spring moved upward *p* p^1 are the coupling boxes for the conducting wires. From the above it is evident that the apparatus must record all that has been played with the greatest exactness. A whole note (see P, Fig. 3) is designated by a line four times as long as for a quarter note and the latter is twice as long as one for an eighth note and so on. Chords, providing their notes are struck at the same time will be marked on a common line and if the notes are all held the same length of time, must be recorded alike in their relation to each other. All the attention required is fastening the paper sheet, winding the clockwork and starting the latter for use. As the conductive wire can be made any desired length, commensurate with the strength of the battery it is evident that the recording mechanism, which makes some 392 noise can be placed in an apartment separate from the one in which the instrument is being played.

The working time of the apparatus, and the paper for the same is sufficient for several hours and furthermore an attachment can be provided by means of which the apparatus *x* can indicate when it is run down.

The Translating Rule.

The wide paper strip P, Fig. 3, as it leaves the recording device after use, is covered with a number of dots and lines. The function of the translating rule is to assist in transcribing the record into ordinary staff notation. The same is represented at *x* Fig. 3 as having a scope of three and a quarter octaves. It is provided with the same sub-division according to which the pins of the recording device are arranged and the notes of the black keys are distinguished from those of the white keys by a different color. For the purpose of facilitating the finding of notes as to their musical value the space between the bass and treble clefs is marked at *z* z^1 Fig. 3 for the *c* below the first staff line of ordinary staff notation.

For the purpose of translating, the rule is laid on the paper in such a manner that the marking line for the *c* below the first staff line corresponds in position with a like mark. By shifting the rule in the same direction in which the marks were made in recording, or by fastening the rule on the recording device and passing the sheet over the rollers, the marks can readily be translated into ordinary staff notation.

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All notes which are in line with the rule were struck at the same time and were held as long as indicated by their length. The key mechanism and the note recording mechanism consist of as many independently working parts, as notes of the musical instru-
893 ment are to be represented in the recording device. The selection of the motor and battery and the finish and shape of the casing are of course arbitrary.

Claim.

The illustrated apparatus for recording the notes played on a key musical instrument, characterized by the key mechanism, located in a box *f* beneath the keyboard and illustrated in Fig. 1 with its keys *g*, the contact springs *h* h^1, and the regulating blocks *l* l^1, the conducting wires *l* l^1, the binding posts *k* k^1, in combination with a recording device on the principle of the Morse receiver and the translating rule by means of which the marks made can be read.

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In the Court of the United States
for the District of New York
The Smith Premier Type Writer Co.
vs
Apollo Company.
Defendants Exhibit
Schneider German Patent
Dec. 4, 1903

KAISERLICHES PATENTAMT.

AUSGEGEBEN DEN 18. SEPTEMBER 1896.

PATENTSCHRIFT

— № 88123 —

KLASSE 51: Musikalische Instrumente.

EDMUND SCHNEIDER in MÜNCHEN.

Vorrichtung zum selbstthätigen Aufzeichnen von auf Tasteninstrumenten gespielten Musikstücken.

Patentirt im Deutschen Reiche vom 29. Januar 1895 ab.

Durch die deutschen Patentschriften Nr. 8147, 37081, 42417, 69210 und 76948 sind Vorrichtungen bekannt geworden, um die auf Tasteninstrumenten gespielten Melodien während des Spielens in einer geeigneten Zeichenschrift selbstthätig aufzuzeichnen.

Alle diese Vorrichtungen haben das Gemeinsame, dafs die schwarzen Tasten ihren Ton nur einfach zeichnen; von der Unterscheidung eines Kreuzes oder Bees ist bei denselben keine Rede, auch mufsten die mit denselben hergestellten Notenschriftstücke entweder mit Hülfe von Schablonen oder durch Hinzuschreiben verschiedener Zeichen und Merkmale erst in einen lesbaren Zustand versetzt werden.

Gegenüber diesen Constructionen soll sich die vorliegende Vorrichtung durch verschiedene vortheilhafte Neuerungen auszeichnen, wie z. B. vereinfachte, besser lesbare Zeichenschrift, sowie die Möglichkeit, durch einfache Verschiebung der einen Schreibhämmerreihe mit den damit in Verbindung stehenden Tasten sowohl in Kreuz- als auch in Be-Tonart spielen zu können.

Die Vorrichtung ist in der Zeichnung in einer Vorderansicht bezw. einem senkrechten Längsschnitt (Fig. 1), einem Grundrifs (Fig. 2) und einer Seitenansicht bezw. einem senkrechten Querschnitt (Fig. 3) schematisch dargestellt; Fig. 4 stellt ein Schema der neuen Notenschreibweise dar, während die Fig. 5, 6, 7 und 8 einzelne Theile der Vorrichtung im Querschnitt und Horizontalschnitt darstellen.

Die Vorrichtung ist in einem länglich rechteckigen Blechkasten *a* von der Gröfse des oberen Hohlraumes des Pianogehäuses untergebracht, mit welchem sie durch zwei Flügelschrauben *f* verbunden ist, die in zwei verticalen Schlitzen der Seitenwände desselben liegen und die zugleich dessen Höher- bezw. Tieferstellung in diesen Schlitzen bezw. dem Pianogehäuse ermöglichen (Fig. 6), je nachdem man den Mechanismus für den Gebrauch mit der Tastenreihe des Klaviers in Verbindung setzen oder denselben bei Nichtgebrauch aufser den Bereich der Klaviatur bringen will. Diese verticale Verschiebung findet in besagten zwei Schlitzen statt und genügt eine Bewegung von 1 cm vollkommen, um ein Schreiben oder eine Aufserbetriebsetzung zu bewirken. Aus dem Boden des Kastens treten 68 senkrechte, unter sich parallele Hebelstangen *g*, welche, wenn die Vorrichtung für den Gebrauch eingestellt bezw. heruntergelassen ist, lose auf den hinteren Enden der Tasten aufsitzen (Fig. 6 und 7). Jede Taste, ob schwarz oder weifs, ist durch diese Hebelstangen mit je einem im Inneren des Kastens *a* befindlichen, auf einer Achse *l* gelagerten Winkelhebel *h* verbunden (Fig. 1 und 7), welche an je eine Horizontalstange *i* angreifen. Letztere sind mit Hebeln *r* verbunden, die lose auf einer gemeinsamen Achse O^{II} gelagert sind und mittelst kleiner Gelenkhebel r^{II} mit Hebeln r^{I} verbunden sind, welche auf einer gemeinsamen Achse *o* festsitzen. Mit den Hebeln *r* sind ferner winkelförmige Schreibhämmer *j* verbunden, welche beim Anschlage einer Taste (Fig. 7) durch eben genanntes Hebelwerk $r\,r^{II}\,r^{I}\,h\,g$ zum An-

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schlag auf eine Rolle k gebracht werden, punktirt, über welche der Notenpapierstreifen m geführt wird. Nach Loslassen der Taste geht das Hebelwerk $r\, r^0\, r^1\, i$, veranlafst durch das Gewicht der Stange g, selbstthätig in die Ursprungsstellung zurück, wodurch auch der Schreibhammer wieder in das Farbkissen p (seinen gewöhnlichen Aufenthaltsort) zurückgeht, um sich für den nächsten Anschlag aufs Neue selbstthätig mit Farbe zu versehen. Die Eintheilung des Hammerwerkes besteht aus zwei über einander stehenden Horizontalreihen, wovon die obere Reihe den Anschlag der 40 weifsen Tasten unveränderlich übernimmt, während die darunter befindliche zweite Reihe, mit den schwarzen Tasten in Verbindung gesetzt, horizontal um einen Ton, d. h. also um eine Notenzeile verschiebbar ist, je nachdem eine Kreuz- oder eine Be-Tonart gespielt werden soll. Die Verschiebung dieser unteren Hammerreihe erfolgt mittelst der Achse o des Hebels r^1, welche durch die Pianovorderwand geht und hier zweckentsprechend mit einem Knopf oder dergl. versehen ist (Fig. 6 und 8). Die Feststellung der Achse o und dadurch besagter Hammerreihe in der ihr jeweils gegebenen Lage kann nur durch an der Achse angebrachte Kerben o^2 erfolgen, welche man mit einer entsprechend am Achslager angebrachten Schneide in Eingriff bringt (Fig. 6), oder es kann die Verstellung der Achse o mittelst einer Schraube o^1 bethätigt werden (Fig. 8), in welchem Falle dieselbe an und für sich in jeder gegebenen Lage selbstthätig stehen bleibt.

Es ist durch diese Verschiebbarkeit der schwarzen Hammerreihe überhaupt erst möglich geworden, der Vorrichtung eine einfache, sie zum Spielen eines jeden Musikstückes befähigende Construction zu geben, da es sonst nicht möglich wäre, mit einer schwarzen Taste ein Be oder Kreuz durch den einzigen Anschlag zu spielen. Entweder müfste der Apparat nur auf Kreuz- oder Be-Tonarten gebaut sein, wollte er seinen Zweck, ein Stück während des Spielens fertig zu schreiben, genügen.

Die Anordnung der beiden Hammerwerke gestattet, ebensowohl jeden einzelnen Ton, als auch nur denkbaren Accord, ja selbst sämmtliche Töne auf einmal zum Schreiben zu bringen, ohne dafs deswegen auch nur die geringste Schwierigkeit für das sichere Functioniren auch nur eines Hammers entstände.

So lange die Taste des Klaviers niedergedrückt ist, so lange zieht der Hammer auf oder zwischen der betreffenden Notenzeile einen Strich, es läfst sich sonach aus der Länge und Kürze der entstandenen Punkte und Striche ein klares Bild über die Zeitdauer der in Frage stehenden Noten gewinnen.

Dabei schreiben die weifsen Tasten schwarze, die schwarzen Tasten rothe Noten (in der Zeichnung Fig. 4 schraffirt), so dafs Vorzeichnungen in Be oder Kreuz von selbst wegfallen, was eine bedeutende Erleichterung für die Schreibweise der Notenschrift überhaupt bildet.

Durch die Länge oder Kürze der einzelnen Punkte und Striche fallen die umständlichen Bezeichnungen für Punkte, Hälse, Fahnen, ganze, halbe, viertel, achtel u. s. w. Noten vollständig weg, ohne dafs deswegen die Taktfähigkeit der Schrift im mindesten berührt wird.

Ein durch Federkraft betriebenes Uhrwerk entnimmt der rechts im Kasten befindlichen Papierrolle m in gleichmäfsigem Zuge etwa 3 m Papierstreifenlänge pro Minute, zieht den Papierstreifen durch die drei Walzen $k^1\, k^2\, k$, wobei die Hämmer auf der mittleren Walze k schreiben, und wirft denselben fertig beschrieben auf der linken Seite des Klaviers aus. Da man im Stande ist, in einer Minute bereits einen completen Marsch zu spielen, so erhellt daraus die Leistungsfähigkeit des Apparates, welcher im Stande ist, in einer Stunde bereits ein ganzes Buch abzuschreiben.

In Fig. 4 der Zeichnung ist auch dargestellt, in welcher Weise die Schrift zum Abdruck gelangt. Dabei ist vor allem auffällig die Schreibweise des alterthümlichen Bafsschlüssels, welcher nunmehr gleichfalls im Violinschlüssel schreibt und gerade dadurch ein erleichtertes Erlernen der Notenschrift überhaupt ermöglicht.

Die Maschine schreibt ihre 68 Noten in einem Zeilenraum von 6 cm Breite, benöthigt also zu ihrer Schrift nicht viel mehr Platz als die bisher übliche Notenschrift. Nach Beschreibung eines Notenstreifens kann derselbe in einzelne Stücke von bestimmter Länge abgeschnitten und die erhaltenen Stücke können in ein Buch der Reihe nach eingeklebt werden.

Patent-Anspruch:

Vorrichtung zum selbstthätigen Aufzeichnen von auf Tasteninstrumenten gespielten Musikstücken mit in zwei Reihen über einander angeordneten, durch Hebel und Zugstangen bewegten Schreibhämmern, dadurch gekennzeichnet, dafs durch Verschiebung der zu den schwarzen Tasten gehörigen Hammerreihe um den halben Abstand zweier Notenlinien von einander sowohl Stücke in Kreuz- als auch solche in Be-Tonarten aufgezeichnet werden können.

Hierzu 2 Blatt Zeichnungen.

BERLIN. GEDRUCKT IN DER REICHSDRUCKEREI.

EDMUND SCHNEIDER IN MÜNCHEN.

Vorrichtung zum selbstthätigen Aufzeichnen von auf Tasteninstrumenten gespielten Musikstücken.

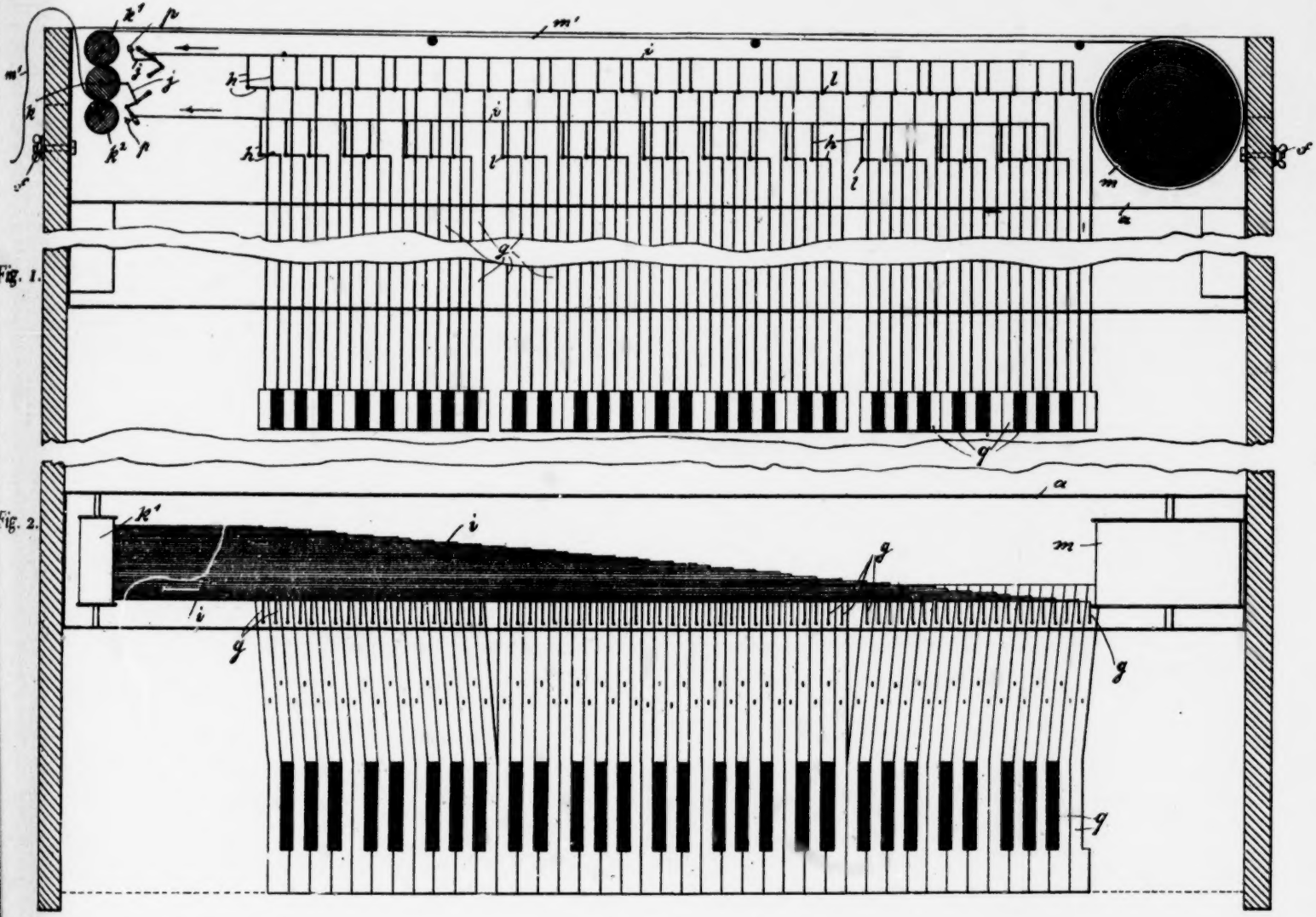

Fig. 1.

Fig. 2.

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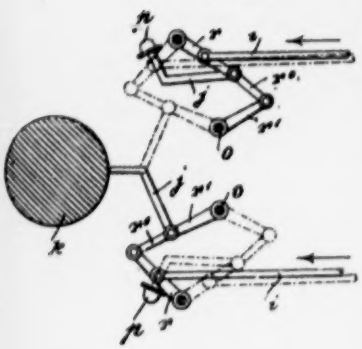
Nos. 110 & 111.
W.S.M.P.Co. v. A.Co.

Blatt I.

Fig. 5.



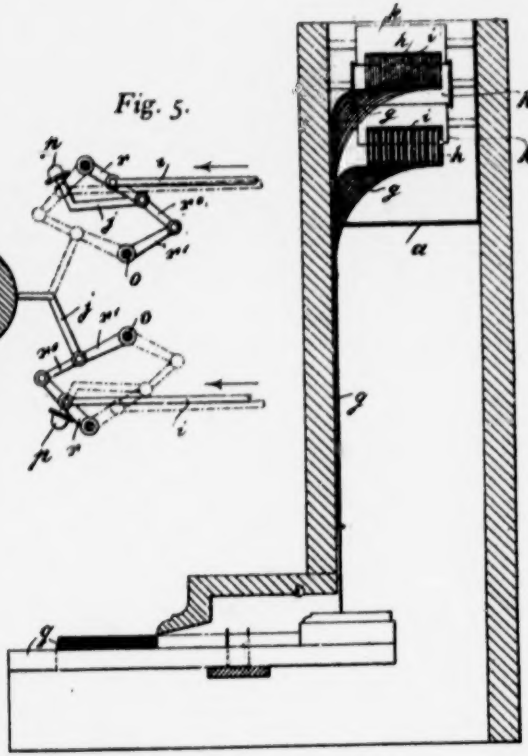
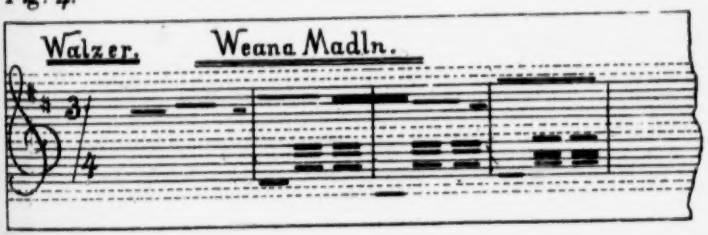


Fig. 3.

Fig. 4.

Zu der Patentschrift

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Nos. 110 & 111.

W.S.M.P.Co. v. A.Co

EDMUND SCHNEIDER IN MÜNCHEN.

Vorrichtung zum selbstthätigen Aufzeichnen von auf Tasteninstrumenten gespielten Musikstücken.

Blatt II.

Fig. 7.

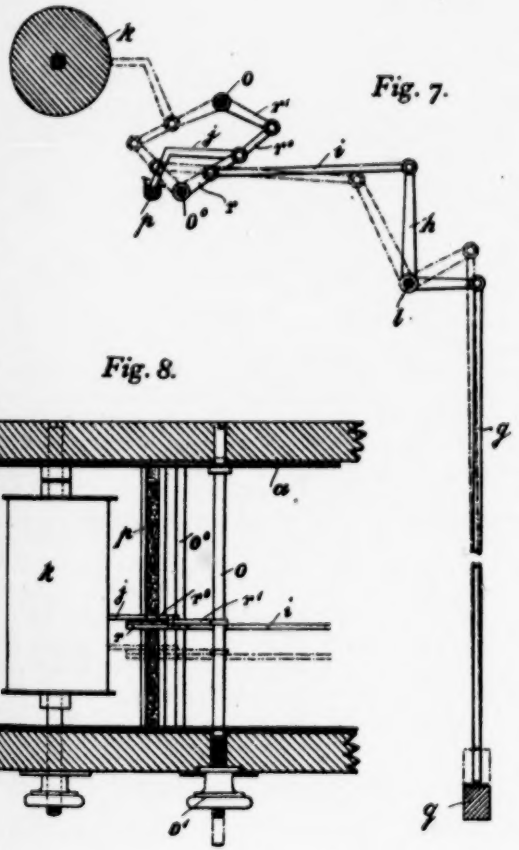


Fig. 8.

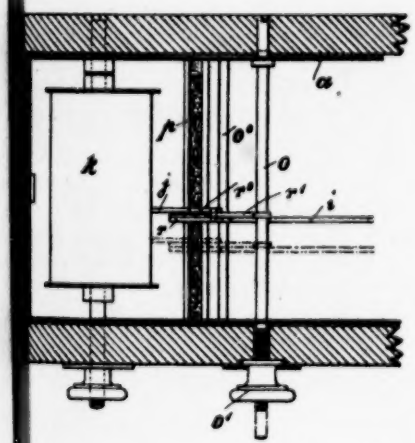
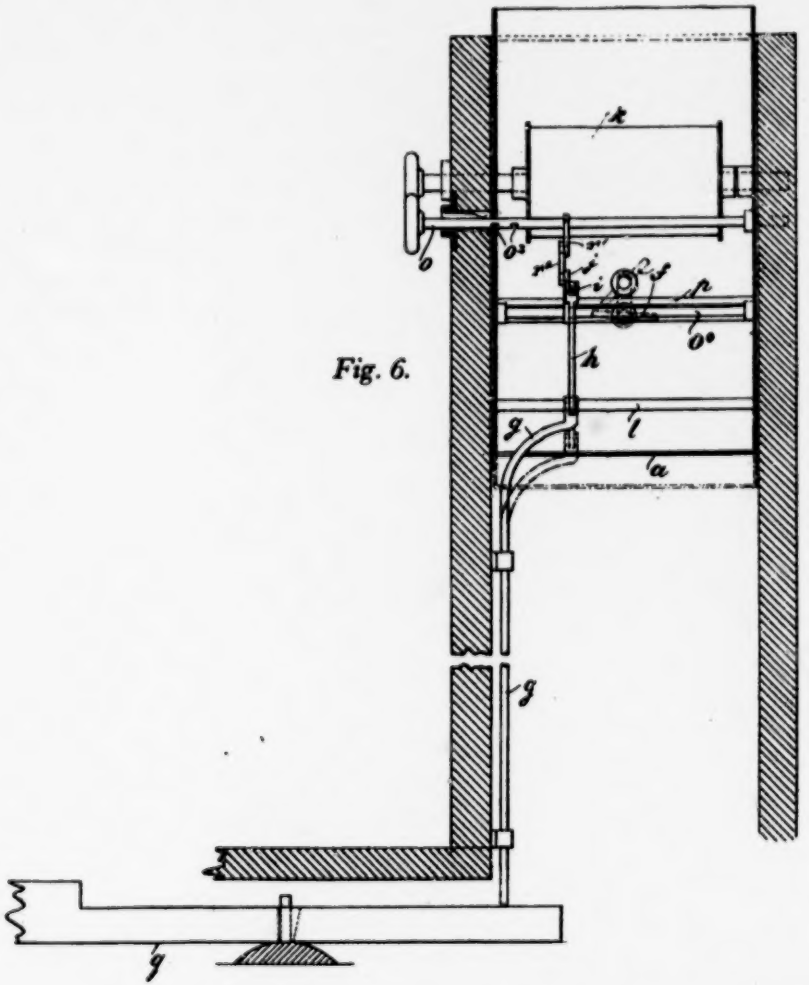


Fig. 6.



Zu der Patentschrift

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398 COMPLAINANT'S EXHIBIT TRANSLATION OF SCHNEIDER GERMAN PATENT.

Imperial Patent Office.

Letters Patent No. 83123.

Class 51—Musical Instruments.

Issued Sept. 18, 1896.

Edmund Schneider at Munich.

Device for Automatically Recording Musical Pieces Played on Key Musical Instruments.

Patented in the German Empire from January 29, 1895.

By the German Patents 8147—37081—42417—69210—and 76948 devices are disclosed, which serve for the purpose of automatically recording, in suitable characters, while playing, melodies played on Key musical instruments.

All these devices have the common feature that the black keys produce only a plain mark and do not produce a distinguishing mark, such as a "sharp" or a "flat" sign, and the music sheets produced by the same had to be elaborated and completed by means of stencils or by the addition of marks and characters so as to be in legible condition.

The present invention is to distinguish from these constructions by various improvements; for example, simplified and more readily legible note characters and the possibility of playing and recording the played piece of music in a sharp or flat key, simply by shifting one row of recording hammers with the keys connected therewith.

399 In the drawings the new device is shown diagrammatically in front view, respectively, in vertical longitudinal section (Fig. 1), in a plan view (Fig. 2) and a side view, respectively vertical transverse section (Fig. 3).

Figure 4 is a diagram of the new style of writing music.

Figs. 5, 6, 7, and 8 show parts of the device in cross section and horizontal section.

The apparatus is contained in a longitudinal rectangular sheet metal box *a* of a size equal to the unoccupied space in the top of the Piano Casing which box is connected with the casing by two winged screws *f*, which pass through slots in the side walls of the casing, and also serve for locking the box in higher or lower position in these slots, respectively, in the piano casing (Fig. 6) accordingly as the mechanism is to be brought in connection with the keys of the piano used or is to be brought out of contact with the keys when the device is not to be used.

This vertical adjustment takes place in these two slots and a movement of one centimeter is fully sufficient to accomplish adjustment for work or out of work.

From the bottom of the box sixty-eight parallel levers *g* project, which, when the apparatus is adjusted for use, that is lowered, rest loosely on the rear ends of the key levers (Figs. 6 and 7). Each key, both black and white, is connected by such a lever *g* with a separate angle lever H, mounted on a shaft L in the interior of the box A (Fig. 1), each of which angle levers engages a horizontal bar I.

The latter are connected with lever *e* which rest loosely on a common shaft O' and by means of *a* short hinged levers e^a are connected with levers e^1, which are fixed on a common shaft *o*. With the levers *e* angular printing hammers J are connected, which when a key is struck are brought in contact with a roller K by means of the levers *e*, e^a, e^1, *h*, *g*. When the key is released, the system of levers *e*, e^a, e^1, *i*, under the action of the weight of the lever *g*, assumed its original position, whereby the printing hammer *p* is returned to the printing pad *p*, which is its normal position, and is thus provided with ink for the next impression.

The system of hammers is divided into two horizontal rows, one above the other, of which the hammers of the upper row print only the notes of the forty white keys; whereas, the second row, below the one above mentioned can be brought in engagement with the black keys and can be shifted horizontally a distance equal to one note, that it can be shifted the distance of one note accordingly as the piece is to be played in a sharp or flat key. The shifting of this lower row of printing hammers is accomplished by means of the shaft *o* of the lever e^1; which projects through the front of the casing and is provided with a button or like device (Figs. 6-8).

The locking of the shaft *o*, and with it said row of printing hammers in the desired position can be accomplished by means of the notches o^2 in said shaft, by bringing a plate at the bearing of said shaft in engagement with one of the notches (Fig. 6), or the shaft can be adjusted by means of a screw (Fig. 8), in which case the shaft automatically remains in the position for which it has been adjusted.

By making the row of black hammers shiftable, one is enabled, for the first time, to simplify the construction of the device, so that any musical piece can be played, as heretofore it was not possible to play a flat or sharp by a single stroke.

The apparatus had to be constructed only for a sharp or flat key only, if it was intended that it should fulfill its purpose, namely, completely write a piece during playing. The arrangements of the two rows of printing hammers permits of printing any desired note, or any conceivable chord or all notes at the same time, without in the least interfering with the proper operating of even a single hammer.

401

As long as a key of the piano is depressed so long the corresponding printing hammer draws a line on or between the corresponding staff lines, and thus, the length or shortness of the lines and marks produced gives a distinct representation of the time value of the notes in question.

The white keys print black notes and the black keys red notes as represented by cross hatching in Fig. 4, so that the flat or sharp marks are not necessary, which is a great simplification in the writing of music. By the length or shortness of the individual marks and lines, the complicated designations for dots, stems, tails, whole, half, quarter, eight, etc., notes can be dispensed with, without in the least impairing the time indicating feature of the music sheet produced.

A spring motor takes about 3 meters of paper per minute, with a constant pull from a paper roll m located in the right hand end part of the box, and draws the strip of paper over the rollers k^1, k^2, k, whereby the printing hammers are enabled to print at the inner side of the roller k and the printed strip is ejected at left hand end of the piano. As a complete march can be played in a minute it is as evident how great the capacity of the device is and that an entire book can be copied in an hour.

Fig. 4 of the drawings illustrates how the music is printed and it should be noticed how the notes of the bass clef are printed, as these are here also printed in the treble clef and this greatly facilitates learning musical notation.

This machine prints its sixty-eight notes in a width of six centimeters and thus does not require much more space than the ordinary staff notation.

After the note strip has been printed it can be cut into lengths and these pasted successively in a book.

402 *Claim.*

Device for automatically recording musical pieces played on key instruments, provided with two rows of printing hammers, one row above the other, which hammers are operated by levers and rods, characterized by the fact that by shifting the printing hammers for the black keys, a distance equal to the space between *to* staff lines, pieces can be played in sharp and flat keys.

fig. 1 VIII^e Siècle.

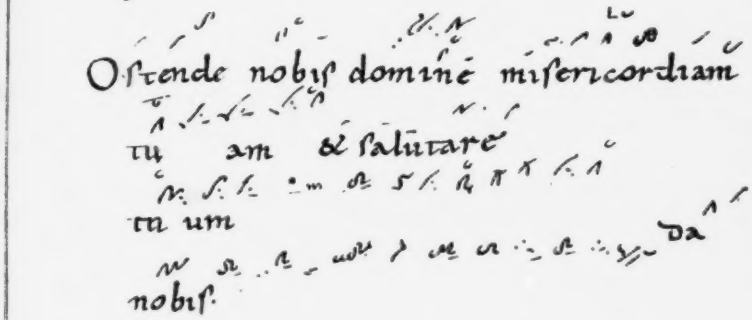
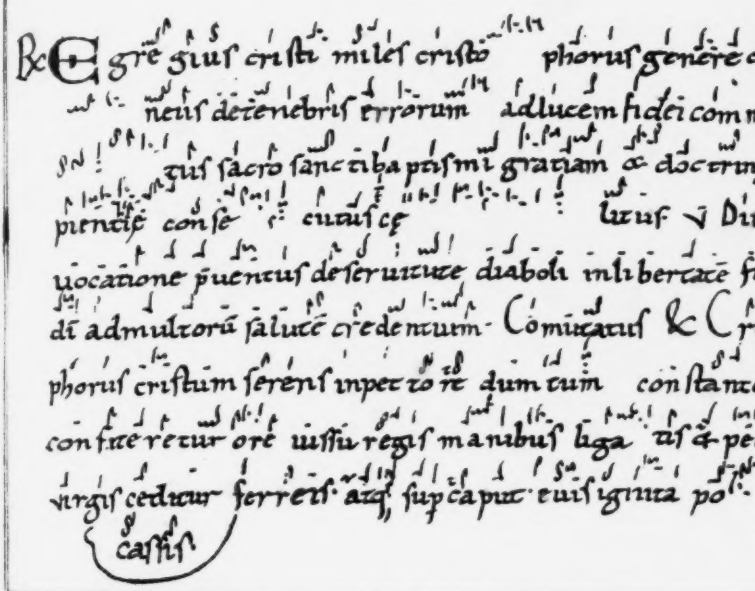


fig 2 IX • Siècle


Rex gre gius cristi miles cristo phorus genere chana
neus de tenebris errorum ad lucem fidei com muta
tus sacro sanc tibi baptismi gratiam & doctrine sa
pientie con se cutus ce luxus v Diuina
uocatione puentus de seruitute diaboli in libertate filiorū
dī admultorū salute credentium Comutatus & Cristo
phorus cristum serenis inpectore dum tum constanter
con fitetur ore uissu regis manubus liga tas & pedibus,
virgis cedetur ferreis atq; sup caput eius igneta po nitur
cassis

BL

PLANCHE II.

Fig 1. IXe Siècle.

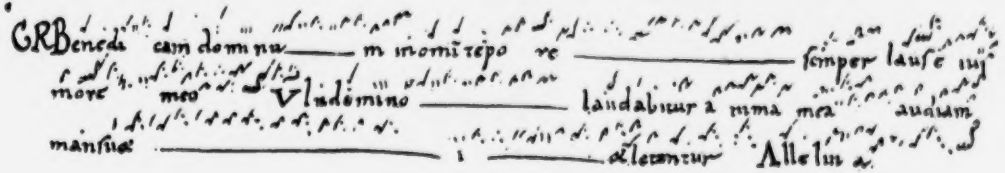
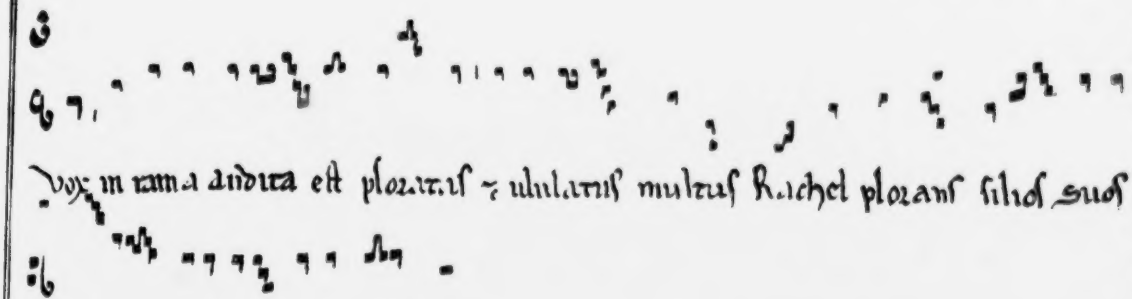

GRBenedi eam domnu m mom̃ tẽpo re semper laus e ius
more meo Vlademino laudabitur a nima mea audiam
mansue l eleemsur Alleluia

Fig. 2. Xe Siècle



BT

fig. 1. X: Siècle

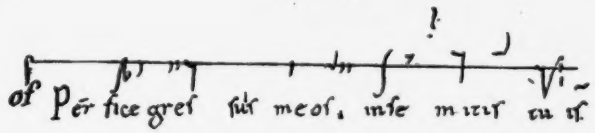


fig. 2. fin du X^e Siècle.

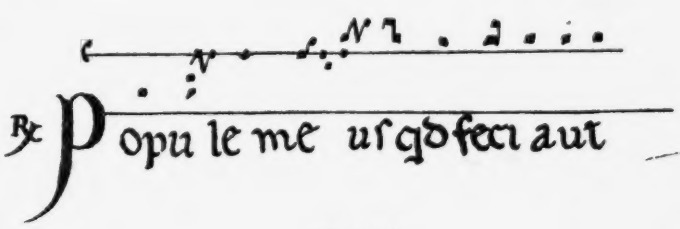
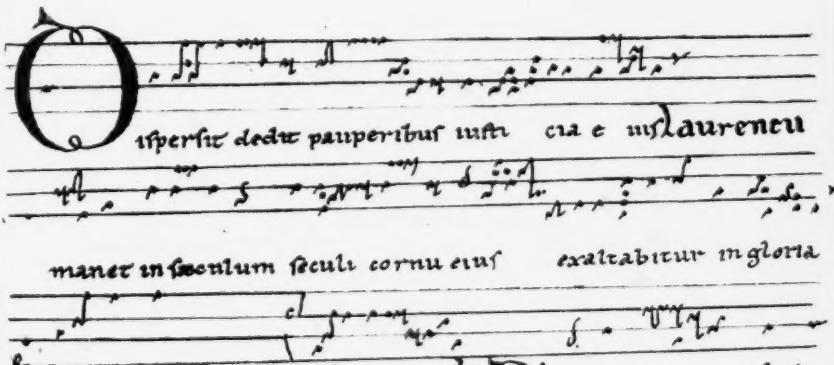
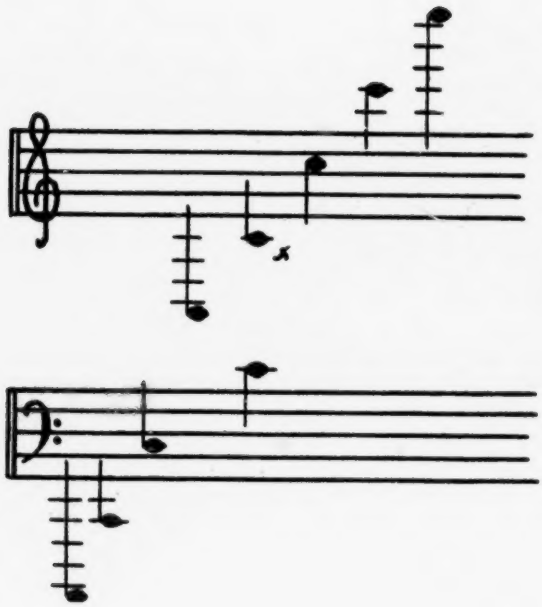
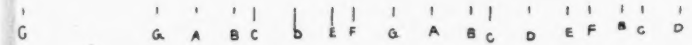


fig 3. XII: Siècle



* Les lignes horizontales ne se voient pas sur le manuscrit original, elles ont été ajoutées par le graveur.

Nos. 110 & 111.
W.S.M.P.Co. v. A.Co.



T Square

...plainant's Exhibit -
...uplet of the Little Cotton Belly Roll
June 22. 1904 Ax

407
408

409 COMPLAINANT'S EXHIBIT No. 1.

(8127.)

(No. 7164.)

COMMONWEALTH OF MASSACHUSETTS:

Be it known that, whereas, Daniel L. White, Walter M. Bacon, James J. Maguire, Banks M. Davison and Lawrence P. Maguire have associated themselves with the intention of forming a corporation, under the name of White Smith Music Publishing Company, for the purpose of printing, binding, publishing and selling musical publications and music and other books, and general job printing, and buying and selling musical instruments and musical works of all kinds, and manufacturing and selling all machinery, tools and articles used in the music business, with a capital of One Hundred Thousand Dollars, and have complied with the provisions of the Statutes of this Commonwealth in such case made and provided as appears from the certificate of the President, Treasurer and Directors of said corporation, duly approved by the Commissioner of Corporations, and recorded in this office:

Now, therefore, I, William M. Olin, Secretary of the Commonwealth of Massachusetts, do hereby certify that said Daniel L. White, Walter M. Bacon, James J. Maguire, Banks M. Davison and Lawrence P. Maguire, their associates and successors, are legally organized and established as and are hereby made an existing corporation under the name of White Smith Music Publishing Company, with the powers, rights and privileges, and subject to the limitations, duties and restrictions, which by law appertain thereto.

Witness my official signature hereunto subscribed, and the seal of the Commonwealth of Massachusetts hereunto affixed, this
410 sixteenth day of April in the year of our Lord one thousand eight hundred and ninety-seven.

[L. S.] (Signed) WM. M. OLIN,
Secretary of the Commonwealth.

COMMONWEALTH OF MASSACHUSETTS,
OFFICE OF THE SECRETARY,
BOSTON, *March* 26, 1898.

I hereby certify that the foregoing is a true copy of the record of the Certificate of Incorporation of White Smith Music Publishing Company, organized under the provisions of chapter one hundred and six, section twenty-one of the Public Statutes.

Witness the seal of the Commonwealth.

[SEAL.] WM. M. OLIN,
Secretary of the Commonwealth.

411 COMPLAINANT'S EXHIBIT No. 2.

(8127.)

Know all men by these presents, that I, Daniel L. White, of Boston in the County of Suffolk and Commonwealth of Massachusetts, for value received, hereby sell, assign and convey to the White-Smith Music Publishing Company, a corporation duly established under the laws of Massachusetts, all and singular, the machinery, tools and fixtures belonging to me and heretofore used by me under the firm of the White-Smith Music Publishing Company, and situated in said Boston, and also all the merchandise on hand belonging to me under said firm and situated in Boston, Chicago and New York City, however the same may be described, and also all the music plates both engraved and stereotyped, and all the titles and copyrights of music and music publications now owned by me under said firm, and also all the store fixtures and furniture owned by me and situated in Boston, Chicago and New York City.

To have and to hold the same to the said corporation, its successors and assigns.

In witness whereof, I have hereto set my hand and seal this Seventeenth day of April, in the year Eighteen hundred and ninety-seven.

(Signed) DANIEL L. WHITE.

412 COMPLAINANT'S EXHIBIT No. 3.

(8127.)

Agreement

made this 17th day of November, A. D. 1896, between White-Smith Music Publishing Company, of Boston, Massachusetts, hereinafter called the Company, and Adam Geibel of Philadelphia, Pa., hereinafter called the composer, to wit:

Whereas: The composer has placed in the hands of the Company the unpublished manuscript of "Kentucky Babe Schottische"

It is hereby agreed between the parties aforesaid, that after publication of said manuscript by the Company, and during the term of copyright of same, it is to pay to the composer or his legal representatives a Royalty of 10 per cent. on the retail price of each and every copy sold in the United States by the Company, after deducting 250 copies from the first edition for the purpose of advertising or otherwise introducing the same. It is further agreed that should the Company receive any royalties by reason of the publication of said manuscript by others in any foreign country, then — per cent. of the amount so received is to be paid to the composer.

The composer hereby grants to the Company and its legal representatives, successors and assigns, forever, the full and exclusive right of copyrighting, publishing and selling said manuscript and copies

thereof in the United States and all foreign countries, and covenants that he is the composer and the sole owner thereof, that the same is free from all encumbrances and that he has good right to grant to the Company the privileges herein contained.

413 The composer hereby further binds himself and his legal representatives to execute all papers and to do all acts and things necessary to obtain any and all copyrights and renewals thereof and to vest the same in the Company, its successors, legal representatives and assigns.

In Witness Whereof, the parties to these presents have hereunto set their hands the day and year above written.

WHITE-SMITH MUSIC PUBLISHING CO.,
D. L. WHITE, *Pres't*,
his
ADAM x GEIBEL.
mark

414 COMPLAINANT'S EXHIBIT No. 4.

(8127.)

This draft must be presented to the Bank within three months after date.

$1.50. BOSTON, MASS., *Nov.* 23, 1896.

Pay to the order of the Librarian of Congress, One 50/00 Dollars

(C Dec. 9.)

in payment of fees for recording the following titles:
"Kentucky Babe Schottische"
"At Eve" Mixed Voices
" Male "

WHITE-SMITH PUBLISHING CO.,
D. L. WHITE, *Pres't.*

No. 1596
To The Boylston Nat'l Bank Boston, Mass.

(Endorsed.)

A. R. Spofford,

Librarian of Congress.

Pay to the Third National Bank New York City, or order,
The National Bank of the Republic, Washington, D. C. Charles S. Bradley, Cashier.
Pay to the order of Third National Bank, Boston Mass.
415 Third National Bank, N. Y. H. Chapin, Jr. Cashier.
Pay only through Clearing House Dec. 10, 1896.
Third Nat'l Bank of Boston H. L. Burrage, Cashier.

COMPLAINANT'S EXHIBIT No. 5.

Copy of "Kentucky Babe."

416 COMPLAINANT'S EXHIBIT No. 6.

(8127.)

Copyright Mailing Receipt.

No. 6443.

(Original.)

REVISED STATUTES, SECT. 4956 (Amended March 3, 1891). No person shall be entitled to a copyright unless he shall, on or before the day of publication in this or any foreign country, deliver at the office of the Librarian of Congress, or deposit in the mail within the United States, addressed to the Librarian of Congress, at Washington, District of Columbia, a printed copy of the title of the book, map, chart, dramatic or musical composition, engraving, cut, print, photograph, or chromo, or a description of the painting, drawing, statue, statuary, or a model or design for a work of the fine arts for which he desires a copyright, nor unless he shall also, not later than the day of the publication thereof in this or any foreign country, deliver at the office of the Librarian of Congress, at Washington, District of Columbia, or deposit in the mail within the United States, addressed to the Librarian of Congress, at Washington, District of Columbia, two copies of such copyright book, map, chart, dramatic or musical composition, engraving, chromo, cut, print, or photograph, or in case of a painting, drawing, statue, statuary, model or design for a work of the fine arts, a photograph of same.

REVISED STATUTES, SECT. 4961. The Postmaster to whom such copyright book, title, or other article is delivered, shall, if requested, give a receipt therefor; and when so delivered he shall mail it to its destination.

Post Office, BOSTON, MASS., *Nov.* 23, 1896.

I have received this day, for despatch, from White-Smith
417 M. P. Co. a Package addressed to the Librarian of Congress, Washington, D. C., containing Copyright Matter, as follows:
One printed title and two complete printed copies each of
"Kentucky Babe" Schottische, A. Geibel.
"At Eve," Mixed Voices, Nellie McHenry.
" " Male " " "

J. W. COVENEY, *Postmaster.*
By R. M.

418 COMPLAINANT'S EXHIBIT No. 7.

(8127.)

(Library of Congress, Copyright, Nov. 25, 1896, Washington, D. C.)

Librarian of Congress,
Copyright Office,
United States of America.

WASHINGTON, ——, 189–.

White-Smith Music Pub. Co., Boston, Mass.:

The undersigned hereby acknowledges the receipt of two copies of "Kentucky Babe," Schottische for Piano. By Adam Geibel.
"At Eve," Four-part Song for Mixed Voices. By Nellie McHenry.
"At Eve," Four-part Song for Male Voices. By Nellie McHenry.
transmitted by you to this Library, in conformity with the laws of the United States respecting Copyrights.

Very respectfully,

A. R. SPOFFORD,
Librarian of Congress,
C.

419 COMPLAINANT'S EXHIBIT No. 8.

(8127.)

No. 64478 B^2. A^2.

Library of Congress, to wit:
Be it remembered,
That on the twenty-fifth day of November, 1896, White-Smith Music Publishing Co., of Boston, have deposited in this Office the title of a Musical Composition, the title or description of which is in the following words, to wit:

Kentucky Babe. A Plantation Lullaby.
Words by Richard Henry Buck. Music by Adam Geibel.
Schottische.

White-Smith Music Publishing Co., Boston, the right whereof they claim as proprietors, in conformity with the laws of the United States respecting Copyrights.

A. R. SPOFFORD,
Librarian of Congress.

I hereby certify that the foregoing is a true copy of the original record of copyright. In witness whereof, the seal of the Librarian

of Congress has been hereto affixed this nineteenth day of May, 1902.

Office of the Register of Copyrights, Washington, D. C.
[SEAL.]

HERBERT PUTNAM,
Librarian of Congress.

Written, E. D. R.
Revised, H. de K. W.
Mailed, W. J. P.

By THONWALD SOLBERG,
Register of Copyrights.

420 COMPLAINANT'S EXHIBIT No. 9.

"Kentucky Babe" Sales.

	Song.	Schot.	M. G.	M. P.
Sept. 18/97	8342	441	323	262
Mar. 25/98	7780	251	199	25
Oct. 19/98	5929	126	44	20
May 8/99	6371	156	99	38
Nov. 20/99	7019	115	65	64
May 21/00	4241	62	42	55
Nov. 25/00	2081	53	63	49
May 18/01	2486	56	50	31
Dec. 15/01	2252	43	39	52
June 4/02	1954	57		
	48,455	1360	924	596
Schot	1,360			
	924			
	596			
	51,335			

421 COMPLAINANT'S EXHIBIT No. 10.

(8127.)

U. Urquhart.

Chandler W. Smith Co.

Pianos and The Apollo.

Wholesale and retail. Piano Player.

Pianos rented, moved, repaired, tuned and polished.

120 & 122 Boylston St., Boston.

Telephone, Oxford 137.

(Endorsed on back:)

1:15 p. m. May 26, 1902.

Bought of

Mr. Urquhart,

1 Roll of Kentucky Babe.

Schott paid $1.20.

422 COMPLAINANT'S EXHIBIT No. 11.

Number of Copies Printed of "Kentucky Babe."

Date.	Male.	Mixed.	Female.
Feb. 1, 1897	500		
Feb. 12, "	.....	500	500
Apr. 9, "	200		
June 1, "	200		
Sep. 1, "	250	200	
Oct. 12, "	250		
Oct. 19, "	.....	.....	200
Nov. 1, "	500		
Nov. 13, "	.....	300	
Dec. 8, "	.....	.....	200
Jan. 15, 1898	500	500	500
Mar. 1, 1898	500		
Mar. 11, "	.....	.....	200
Mar. 28, "	350		
May 2, "	500	.....	250
May 10, "	.....	300	
June 1, "	.....	.....	250
Sep. 14, "	.....	300	400
Oct. 7, "	300		
Nov. 1, "	300		
Nov. 9, "	.....	500	300
Dec. 9, "	550		
Jan. 12, 1899	400	.....	400
Mar. 1, "	500		
Mar. 14, "	.....	400	
Mar. 21, "	.....	.....	250
May 1, "	.....	400	500
May 1, "	.....	500	
May 24, "	500		
Sep. 16, "	.....	500	
Oct. 22, "	350		
Nov. 1, "	500		
Nov. 9, "	400	.....	400
423 & 424			
Jan. 9, 1900	.....	400	
Feb. 10, "	500		
Mar. 1, "	.....	.....	300
Mar. 14, "	.....	.....	300
Apr. 14, "	300	350	
Apr. 27, "	500		
June 1, "	.....	.....	300
Oct. 1,	.....	500	
Oct. 15, "	500	.....	500
Nov. 27, "	500		

Date.	Male.	Mixed.	Female.
Jan. 25, 1901	300	500	
Feb. 25, "	.....	.....	300
Mar. 1, "	500	.....	500
Mar. 19, "	500		
May 1, "	.....	500	300
May 20, "	500		
Sep. 2, "	300		
Sept. 2, "	300		
Nov. 20, "	300	.....	500
Jan. 14, 1902	500		
Jan. 24, "	.....	650	
Feb. 1, "	.....	.....	500
Feb. 11, "	600		
Apr. 1, "	400	450	
Apr. 7, "	.....	.....	500
June 25, "	400		
July 15, "	.....	.....	500
Oct. 1, "	500		
	14950	7750	8650
			7750
			14950
Total Male, Mixed and Female			31350

425 Circuit Court of the United States, Southern District of New York. In Equity.

WHITE-SMITH MUSICAL PUBLISHING COMPANY
vs.
APOLLO COMPANY.

Answer of the Defendant to the Bill of Complaint.

This defendant, now and at all times reserving unto itself all and all manner of benefit and advantage of exception which may be taken to the manifold errors and insufficiencies in said Bill of Complaint contained, for answer thereunto, or to so much of such parts thereof as this defendant is advised is material or necessary to be answered, says:

1. This defendant admits that it is a corporation duly organized and existing under the laws of the State of New Jersey, having place of business in the borough of Manhattan, County and State of New York, in said district.

2. As to whether Adam Geibel was on the 1st day of May, 1897, a citizen of the United States, and was the author of the musical composition mentioned, to wit, *"Little Cotton Dolly"*; and as to whether the same was at said date unpublished; and as to whether said Daniel L. White was a citizen of the United States; and as to whether on

May 2, 1897, or at any othe- date, the said Adam Geibel as-
426 signed, transferred and sold to said White under the name of the White-Smith Musical Publishing Company, or under any other name, the said alleged musical composition; and whether, if such sale was made, it included the full exclusive right of copying, publishing and selling the same in the United States; and whether by said means, or any means, the said Daniel L. White became the sole owner and proprietor of said musical composition, this defendant has no knowledge or information save as it is informed in and by said Bill of Complaint; and this defendant, therefore, denies all said averments of said Bill of Complaint, and prays that the complainant may be required to make strict proof thereof;

That whether before the publication of said alleged musical composition in this or any foreign country on the 15th day of May, 1897, or at any other date, the said Daniel L. White, doing business under the name of White-Smith Musical Publishing Company, or otherwise took proper steps, in accordance with the statutes of the United States, for obtaining copyright as of said musical composition as proprietor thereof, as recited in the said Bill of Complaint, this defendant has no knowledge or information save as it is informed in and by said Bill of Complaint; and this defendant, therefore, denies all said averments of said Bill of Complaint, and prays that the complainant may be required to make strict proof thereof.

This defendant, further answering, denies that by virtue of anything in said Bill of Complaint cited said complainant became, is now or ever has been entitled to any exclusive rights in respect to the printing, reprinting, publishing, completing, copying, executing, finishing and vending, dramatizing or translating of said musical composition.

As to whether the first publication of said musical composi-
427 tion in this or any foreign country was made by said complainant at the date and place alleged in this Bill of Complaint; and as to whether the same continued to be so published until the present time, this defendant has no knowledge or information save as it is informed by said Bill of Complaint, and prays that the complainant may be required to make strict proof of said avermeats as far as the same may be material.

As to whether, upon every copy of said musical composition published by said complainant or its alleged assignor, there has been inscribed upon a visible portion thereof the copyright notice required by law, this defendant has no knowledge or information save as it is informed in and by said Bill of Complaint; and this defendant, therefore, denies all said averments of said Bill of Complaint, and prays that the complainant may be required to make strict proof thereof.

This defendant, further answering, denies upon information and belief that the said alleged copyrighted musical composition is of great value, and denies that the value thereof exceeds the sum of Five Thousand Dollars ($5,000).

This defendant, further answering, denies that it did on or about the 1st day of January, 1902, or at any other time since the alleged

date of said alleged copyright, without the consent of the complainant, or otherwise, at the City of New York, or elsewhere, within the United States, publish and sell, or publish, or sell, any copies of said musical composition; and denies that it is threatening to publish and sell, or to publish, or to sell, such copies, or to supply the market therewith in any manner; and denies that it is doing or has ever done or threatened to do any acts whatsoever in infringement of said alleged copyright or in violation of the alleged rights of said complainant in respect to said musical composition.

428 This defendant, further answering, denies that it has ever made or acquired or obtained or caused to be diverted to itself, the sum of Five Thousand Dollars ($5,000), or any other sum, as profits of the publication and sale, or of the publication, or of the sale, of any copies of said musical composition.

This defendant, therefore, denies and contests the right of the complainant to any writ of injunction, preliminary or perpetual, restraining and enjoining this defendant, its agents and servants or any of them from copying, publishing, selling, or offering for sale, copies of said alleged copyrighted musical composition or any colorable imitation thereof; and denies and contests the right on the part of said complainant to have an accounting from this defendant of any profits alleged to be derived from copying, publishing, selling, or offering for sale said musical composition; and denies and contests the right of the complainant to any relief asked for in said Bill of Complaint, or to any other or further relief whatsoever in the premises.

And this defendant denies all unlawful acts wherewith it is in said Bill of Complaint charged, and without admitting any of the matters therein charged and not herein fully answered, to be true, prays to be hence dismissed with its costs in this behalf most wrongfully sustained.

THE APOLLO CO.,
[SEAL.] By G. F. ABENDSCHEIN,
Secretary and Treasurer.

CHAS. S. BURTON,
Of Counsel.
WILCOX & BRODEK,
Solicitors for Defendant.

429 United States Circuit Court, Southern District of New York.
In Equity.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

Testimony taken on behalf of defendant, pursuant to notice, under and pursuant to the 67th Rule of the Supreme Court, as amended, before Edward T. Wray, Esq., notary public, at the office of Burton & Burton, No. 1410 Marquette Building, Chicago, Illinois, on Wednesday, April 8, 1903, at 11 a. m.

Appearances: Alexander P. Browne, Esq., and Louis C. Raegener, Esq., of counsel for complainants; Charles S. Burton, Esq., and Edward S. Evarts, Esq., of counsel for defendant.

F. W. HEDGELAND, witness called on behalf of defendant, being first duly sworn, deposes and testifies as follows in answer to interrogatories proposed by Mr. Evarts:

Q. 1. Please state your name, age, residence and occupation?

A. Frederick W. Hedgeland; Chicago; thirty-six; superintendent of the piano-player and church organ department, W. W. Kimball Company, Chicago.

Q. 2. How long have you been connected with the Kimball Company?

A. Eleven years.

Q. 3. And how long have you been giving your attention to the piano-players and automatic players for that firm?

A. Nine years.

Q. 4. How long have you been connected with the musical
430 instrument trade—how long previous to your connection with the Kimball Company?

A. Twenty years in all.

Q. 5. Please state for whom you worked on automatic instruments prior to your employment by the Kimball Company and where?

A. I was in business for myself, previously to that for Geo. White, London, England.

Q. 6. What did you do for Mr. White?

A. I had charge of the mechanical musical instruments exhibited in the Inventions Exhibition held in London in the year '82 or '3.

Q. 7. By whom were those instruments made?

A. By the Mechanical Organette Company, New York City.

Q. 8. You understand thoroughly, do you not, the construction and operation of piano-players?

A. Yes, sir.

Q. 9. Who devised the piano-player made by the Kimball Company?

A. It was manufactured under my design and devices.

Q. 10. Have you obtained any patents upon the piano-players or self-playing instruments?

A. Several patents.

Q. 11. What is the function of a perforated sheet in a piano-player or self-playing instrument?

A. To control the machine for which it is manufactured.

Q. 12. How does it perform that function?

A. By keeping the operating air ducts sealed until a note or notes is desired to be sounded, when by means of the perforations atmospheric pressure is admitted to the ducts, which in turn operates the pneumatic devices.

Q. 13. Can a piece be produced by an automatic piano-player without the use of the perforated roll?

431 A. Not without the use of a perforated roll or pin drum to act as controller.

Q. 14. How is it about the self-playing instrument intended to be controlled by perforated rolls?

A. It requires the same means to control it.

Q. 15. Do different manufacturers of perforated rolls all cut them to the same scale or different scales?

A. They are cut to different scales by numerous manufacturers.

Q. 16. Can a perforated roll cut according to one lineal measurement or scale be used in a piano-player constructed for a different lineal measurement or scale?

A. Not without change in the tracker range or mouth-piece over which it passes.

Q. 17. About how fast, on the average, does a perforated roll move?

A. Five and one-half feet per minute.

Q. 18. Can you give the extremes of movement?

A. Four to eight feet per minute.

Q. 19. You are quite familar with the scale used by the Kimball Company for its perforated rolls, are you not?

A. Yes.

Q. 20. Are you able from an inspection of one of the Kimball perforated rolls to state what note any particular perforation will produce from its position on the sheet or roll?

A. No, unless I should use a templet on it to locate the same by.

Q. 21. Can you tell from the length of any perforation the length of the note it is intended to produce?

A. No.

Q. 22. As a matter of fact, the length of the perforation is a very uncertain guide as to the length of the *roll*?

A. Yes.

432 Q. 23. Is it or is it not a fact that two perforations, each intended to represent a note of the same length, as, for instance, a half or a quarter note, be cut of different lengths in the sheet?

A. Yes, at varying lengths.

Q. 24. Are the perforations frequently lengthened in order to produce a ritard in the performance?

A. Yes.

Cross-examination by L. C. RAEGENER:

X Q. 25. Where is the place of business of the W. W. Kimball Company, and what is its business?

A. Wabash and Jackson streets, Chicago, Illinois. Its business is manufacture of pianos, organs, piano-players, self-playing reed organs and pipe organs.

X Q. 26. What is the name of the automatic self-player manufactured by this company for use in connection with a piano?

A. The Kimball.

X Q. 27. Is that its only name?

A. That is all that appears on the machine.

X Q. 28. Has it any other name in trade circulars and catalogues?

A. The Kimball player.

X Q. 29. Have you now given all the names by which this instrument is designated by you or your company or your salesmen?

A. It is commonly known as the Kimball Player. Sometimes as the Kimball Piano-Player. These are the only terms I know being applied to them.

X Q. 30. Referring to your twelfth answer, who is it that expresses the desire to sound certain note or notes upon the piano in conjunction with which the Kimball self-player is used?

A. The person who buys—the owner of the machine.

433 X Q. 31. And does such person always desire to express the same sound or sounds?

A. I do not know what his desires are, but every time he uses the machine and places the same controller in it he gets a reproduction of the same notes themselves.

X Q. 32. But when such person desires to sound the notes of a funeral march and at other times the notes of a waltz he indicates his desire by changing, as you say, the controller, or, as I would say, by taking different perforated music rolls and putting them on or in the instrument; is that correct?

A. Yes.

X Q. 33. A person who desires to cause his fingers to sound certain notes on one of the pianos manufactured by your company buys sheet music, and if he wishes to sound these same notes on the Kimball self-player he buys perforated musical records, does he not?

A. Necessarily he does not buy sheet music, but it is necessary for him to have a perforated roll to obtain any music out of a piano-player.

X Q. 34. In other words, he can at all times, whether he is familiar with the music or not, obtain the sounds he desires to hear by using a perforated music record in the Kimball, but if he does not know how to play piano or has never heard the particular musical composition which he desires to hear he cannot have the piano sound the note unless he has sheet music before him to begin with?

A. It depends upon his manipulation and the arrangement as to the musical results obtained, or the reproduction of them. It is not a necessity to purchase the music sheet.

434 X Q. 35. If it is not a necessity to purchase the music sheet, while you seem to think that it is a necessity to purchase the music rolls, how can the person desirous of having

a certain piece of music sounded upon a piano get along without music sheets?

A. The player is a mechanical device and requires a controller to actuate it. The individual must first have heard the air to have created a desire for the piece, and may have committed the same to memory and ear and so reproduce it. It is a very common thing for pianists or organists to play a heavy program without a sheet or memorandum of music in sight.

X Q. 36. Before the date of self-players how could the ordinary individual fond of music, but not an artist, have musical compositions reproduced for him?

A. By having them written in musical characters. Automatically operated instruments date back very close to the time of which you speak.

X Q. 37. And when was that time?

A. 1840.

X Q. 38. Before that time musical compositions were reproduced upon musical instruments by players who had before them compositions, as you say, "written in musical characters"?

A. I presume so.

X Q. 39. What do you call the hieroglyphics or characters upon the musical rolls, or, as you prefer to call them, "controllers," used in the Kimball, and which hieroglyphics or characters change as the desires change to hear different notes sounded?

A. They are all perforations, and no desire that the performer might have can possibly change the note or add to it.

X Q. 40. Well, the ordinary player upon the piano, having selections from one opera before him in the shape of sheet music, if he should desire to hear selections from another opera, would
435 likewise be obliged to change the record. The thing that would control in both cases would be the different musical records, would it not?

A. In the sheet music it would be a matter of choice, of playing from the sheet music or by ear. In the player, it would be a necessary choice of the record, as you term it.

X Q. 41. Please name a few of the self-players of which, in your opinion, most are sold at this time?

A. Pianola, Chase & Baker; Apollo, Kimball.

X Q. 42. Can the music roll records made for the Pianola be used in the Kimball?

A. No, sir.

X Q. 43. Why not?

A. The measurements between the perforations is greater in the Kimball than in the Pianola, and the perforations and holes in the mouth-piece would not match.

X Q. 44. From what source, if you know, does your company obtain the various musical compositions which its controllers or rolls enable your self-player to produce or perform?

A. By different means. From several sources or by several means.

X Q. 45. Will you mention the various sources or means that you know of?

A. By reproduction from the playing of an instrument mechanically arranged, the reproduction by automatic means, from either or both.

X Q. 46. I do not fully understand your answer and will ask you to be a little more specific.

A. By perforating the sample sheet with a perforating machine; that is, under the control of a performer which records in perforations his touch, and by laying out the sheets mechanically by mechanical arrangement; the latter is the system most in vogue. The sample sheets are used to duplicate any reproduction that
436 is desired.

X Q. 47. I think you have misunderstood my question, in part at least. I want to know from what source you get the musical composition which you reproduce on the perforated sheet, not the matter of its manufacture.

A. We never have bought any or acquired any musical compositions.

X Q. 48. Then do you mean that everything published by you is composed by your employees, and that you never have published rolls or sheets which produce the music of others?

Objected to, as the witness has not said his company publishes anything, but has been speaking solely of something manufactured by his company.

A. Our sheets reproduce the arrangement that is laid out mechanically or manually.

X Q. 49. And from what source does the layer-out obtain this arrangement, or, as I should call it, musical composition?

A. In part from the musical composition, the rearrangement on his part to adapt it to the machine it is to operate.

X Q. 50. Now, where does he get the musical composition which he arranges or adapts and lays out as stated?

A. I don't know where.

X Q. 51. Don't you have anything to do with this part of the business?

A. Not the part of which you speak.

X Q. 52. Your acquaintance with the business of the Kimball Company relates, then, wholly to the mechanical end of its business and not to the selection of compositions, etc.?

A. Yes, sir. I have nothing to do with the purchasing department.

437 X Q. 53. Does your company make its own perforated music rolls or controllers?

A. Yes, sir.

X Q. 54. Are these controllers made in your department and under your supervision?

A. Yes, sir.

X Q. 55. Is it not a fact that most of them are made either from

perforated music rolls or controllers made by other manufacturers or else from printed music sheets?

A. As stated in the previous answer, the manufactured article is reproduced in the perforated roll.

X Q. 56. And the perforated roll from which the manufactured article is reproduced is usually a perforated music roll previously made by some other manufacturer?

A. This is an assumption on your part. I have answered fully in the previous answer the process of making the first music roll.

X Q. 57. Do you mean to say that you do not know whether or not the majority of music rolls made by your company are not made from music rolls theretofore made by other manufacturers?

A. We produce, as stated above, our rolls from our own samples. We manufacture like pieces same name as other manufacturers, but they are not an exact reproduction.

X Q. 58. Am I correct in assuming that your company produces perforated music rolls in three ways: First, sometimes the company takes printed sheet music and from it makes what I will term a perforated matrix or record; second, that sometimes the company takes a perforated music roll made by another manufacturer and makes its own perforated matrix or record from the record
438 of the other manufacturer; and, third, that sometimes the company induces an artist to play upon a piano to which there is attached an automatic recording device which produces a perforated matrix from which perforated music rolls may be produced. In all of the three cases, I assume that some modification, changes, alterations and rearrangements may be necessary, and, as a matter of fact, are made?

A. These methods are the ones usually in vogue, and our concern uses them.

X Q. 59. Now, in the course of this cross-examination I have by preference spoken of perforated musical records or rolls. You have designated these rolls as "controllers," and of course, as both of us are fully conscious of the issue we are trying here, please tell the court what your company, in its ordinary intercourse with persons who desire to have certain note or notes sounded—and I am paraphrasing your language—call these controllers and what your company, in dealing with the ordinary people, who are not trying law suits, call these controllers.

A. They go commonly by the name of "music rolls."

X Q. 60. As a matter of fact, does not your company even go so far as to shorten the brief term "music rolls" into "music"?

A. Such an abbreviation has been made.

X Q. 62. I show you "Catalogue of Music for the Kimball Piano-Player," and at the bottom of the cover I find the words, "W. W. Kimball Company"—I purposely refrain from saying "published by W. W. Kimball Company"—and I ask you is this not the catalogue distributed by your company in connection with the sale of the Kimball self-players and the controllers therefor?

A. It is a catalogue of the controllers for the player.

This catalogue offered in evidence and marked "Complainant's Exhibit Catalogue of Music for the Kimball Piano-Player."

439 X Q. 63. It is a fact, is it not, that your company not only calls these controllers "music," but frequently refers to them as "music-folios," "compositions," meaning of course musical compositions?

A. These terms appear in our advertising, and are placed there for effect. Nobody would attempt to call the roll a composition, as a matter of fact, as alone it is nothing, and without the aid of the machine we manufacture to go with it, it would reproduce nothing.

X Q. 64. Surely the statements in these advertisements of your company are true. You don't claim that your company desires to deceive the public; and, by the way, what "effect" do you desire to produce in these advertisements by calling these controllers "music" and "music-folios" and "musical compositions"?

A. These terms appear in our advertising as the result of an erroneous custom; the cylinder of a barrel organ might just as well be termed a "musical composition," or the drum of a phonograph so designated. As stated above, they are not in a true sense of the word, a composition, and not advertised with a view to deceive any one, but have been misnamed in the early stages of the art.

X Q. 65. You are quite correct, in making this statement, that the cylinder of a barrel organ or the drum of a phonograph are records of "musical compositions," but when was it that you and others discovered that it was a misnomer to designate these controllers "music" or "music folios" or "compositions"; was it since this suit was commenced, and if not, how long before this suit was commenced did you make this discovery?

A. I cannot speak for others; neither have I talked with any one interested in this suit. This has always been my conviction, and prior to any knowledge of this suit.

440 X Q. 66. In this pamphlet in which the word "music folios" and "composition" appears, I notice on the cover there are the following statements: "New Era of music refining the world." When did this new era begin and when did these controllers of the W. W. Kimball Company of Chicago begin "refining the world"?

A. The term is a ridiculous one. Our controllers have been in existence about two years. Prior to that time other manufacturers have been manufacturing like devices for at least two decades. This is an error of composition by the advertising writer.

X Q. 67. Don't the advertising writers employed by the W. W. Kimball Company of Chicago make truthful statements in the advertisements circulated by your company, or are they all ridiculously untrue statements; or do the advertising agents employed by your company frequently make statements which you and other employees and officers of the company must, under oath, repudiate?

A. I did not state that the statement was untrue, or that we employed advertisers to make untrue statements for us. I stated in my previous answer the term was ridiculous, as it appeared to me as an individual.

X Q. 68. Then it is true, though you seem to draw the distinction between you as an individual and as an employee of the Kimball Company, that "a new era of music refining the world" began with

the introduction of these controllers, and the multiplication and sale of these self-players?

A. This statement that it seemed ridiculous to me, since you have asked the question, is doubtless true when taking into consideration that the necessary adjuncts are a Kimball player and a Kimball piano. In this combination it would be a new era of music.

441 The paper referred to and offered in evidence marked "Complainant's Exhibit New Era of Music Refining the World, W. W. Kimball Company, Chicago."

X Q. 69. I show you another literary production of your company which, after referring to the "fingers" of the "Kimball" reads as follows: "There is no composition, however elaborate or simple, that they will not execute with equal precision and thoroughness, from the slowest funeral march to the most rapid dance music, all as though some masterhand were rendering to the ear the splendid fashion of a Rubenstein or a Bach, or the sublime harmonies of a Mendelssohn or Beethoven, and, * * * it is amazingly self-sufficient and self-reliant, even to turning the pages and closing the folio at the end of the performance." All these advantages which I have just read to you are possessed by the Kimball, are they not?

A. Yes, through the agency of the controller.

The document offered in evidence marked "Complainant's Exhibit New Era of Music Refining the World, W. W. Kimball Company No. 2."

X Q. 70. It is a fact, is it not, that throughout all these publications of your company, your company has treated these controllers as records and reproductions of musical compositions?

A. In connection with the player, yes.

X Q. 71. Well, in order to obtain a reproduction of a musical composition not familiar to the ordinary piano-player, a record in the shape of printed sheet music is likewise required by a "player"?

A. Yes, but in this instance he requires a special piece of mechanism to go with it before he can produce any music from it.

442 X Q. 72. Now, in your capacity as an individual, because you have drawn the distinction between yourself as an individual and as an employee of your company, don't you agree with me that these controllers published, or if you do not like the term "published," let us say "manufactured," are records of musical compositions?

A. They are mechanical records similar and identical in function with others that have been manufactured for six decades.

X Q. 73. Admitting that answer to be true, that does not make them any less "records" of musical compositions, does it?

A. It does, because many are records of no musical composition.

X Q. 74. What do you mean by that; what are not records of musical compositions?

A. As stated in previous cross-examination they are a reproduction of the record that is laid out in three different ways.

Redirect examination:

R. D. Q. 75. In your answers to cross-questions 36 and 37 you say that automatically operated instruments date back very close to 1840. What classes of automatically operated instruments were in existence in 1840?

A. Barrel organs. I have read of them and seen very old samples called "specimens."

R. D. Q. 76. Your answers refer then to this barrel organ?

A. Yes.

R. D. Q. 77. Is there any similarity between the barrel of a barrel organ and the perforated roll of the piano-player of today? If so, please state.

A. Their function is identical as they are both used to control the machine, or musical instrument.

443 Recross-examination:

R. X Q. 78. The points on the barrel organ, the perforations on the "musical folio" or controller, the hieroglyphics on printed sheet music all indicate what notes the player is to sound, do they not?

A. No, sir.

R. X Q. 79. What do they indicate?

A. The pins on a cylinder control the stops of the instrument as well as the valve mechanism. The same is true of a perforated roll, some omitting the mechanical movements as far as stops or pedals go, confining them to notes to be sounded. Neither of these processes, either the barrel or the sheet, denotes or designates what it is to the eye, whereas a musical composition does. This is the difference.

R. X Q. 80. Then, in your opinion, the pins and perforations do not tell the eye what notes are to be sounded, but they do, do they not, cause the sounds to be heard by the ear?

A. Yes.

FREDERICK W. HEDGELAND.

Adjourned until April 9th, at 11 o'clock.

April 9, 1903.—Resumed, pursuant to adjournment.

Ernest G. Clark, witness called on behalf of the defendant, being first duly sworn, testifies as follows:

Direct examination by C. S. Burton:

Q. Please state your name, age, residence and occupation?

A. Ernest G. Clark; 7120 Yale avenue, Chicago, Ill.; 36; manufacturer of perforated rolls for musical instruments.

444 Q. 2. How long have you been engaged in your present occupation?

A. About three years.

Q. 3. Do you personally have anything to do with the actual processes of manufacture of perforated rolls? If so, state what part you are personally connected with?

A. In arranging and general direction of the manufacturing of the aforesaid perforated rolls.

Q. 4. Do you personally perform any of the processes in the manufacture?

A. I have at times; and in a great many instances where I have been called upon to do so, I perform the arranging in part, and the general direction, as heretofore stated, of completing this work.

Q. 5. Please explain what you mean by arranging, in your last answer.

A. To reproduce the effect in such form from the score that it would duplicate the certain tones and sounds from that score when placed in connection with the machine with which it is to be used.

Q. 6. What do you refer to by the word "it" in the last sentence of your answer, "in which it is to be used"?

A. The perforated sheet.

Q. 7. Please explain the steps in the process of arranging for the cutting of the perforated sheet as performed by you when you do that work yourself. That is, supposing you have in mind to manufacture perforated rolls which, in connection with the player, should produce a certain piece of music. State how you go about it to get ready to manufacture such rolls and give the different steps in the process of manufacture from the commencement to the actual making of the final perforated rolls for sale.

A. Having the score at hand we place upon a suitable table,
445 convenient for the arranger, a sheet of paper fed from a large roll, and upon this paper we place a rule or guide upon which are marked at regular intervals the letters of the scale and their relative octaves to guide the arranger in placing the note or notes in their proper position. A graduated schedule is used in producing the desired length of the note or rest and to ascertain other marks which are indicated in the score. The reason of the scale and the graduated schedule is to assure the arranger of the proper location and position of the notes. From this point the marked sheet is passed into the hands of an operator who by hand process and the lines guiding, cuts the desired aperture in the paper. From here it goes into the hands of the inspector who, with the use of the score, and the sheet in connection with the machine, endeavors to locate and detect any irregularities or mistakes, if there be any, the same being marked and returned to the arranger. This person takes the same sheet in hand and, through the assistance of the first process, scale and graduated schedule, makes corrections marked by the inspector. Again it is returned to the inspector for final testing, and, if correct, is O. K'd. This perforated sheet constitutes what is called the original. However, the original being of such paper unsuitable for machine work, the same or original is transferred to what we may term paper used for master or, properly speaking, the templet. The process of transferring is produced by the use of ink rollers to be used as a guide for the one to cut out the final aperture. In this process the only difference from the operation on the original, as regards cutting the apertures, is that a calculating device in the hands of the operator enables him to locate and to bring into perfect alignment the afore-

said apertures. At this point the master is placed in convenient receptacles ready for the perforating machines.

Q. 8. If I correctly understand you, the first sheet which is
446 to constitute what you call the original, has the position of the various apertures and their lengths marked upon it by the arranger, who located them in the width of the sheet according to the notes which are to be sounded by means of the apertures, by the use of a graduated scale or rule, whose sub-divisions are marked with the letters of the musical scale in their several octaves extending across the width of the sheet, or so much of it as is to be perforated. Is this a correct understanding of this first step in the process?

A. I didn't term that a graduated scale.

Q. 9. You used the phrase "a rule or guide upon which are marked at regular intervals the letters of the scale." Please explain in what respect the term "a graduated scale" is incorrect.

A. A graduated scale cannot apply to anything that is marked at regular intervals.

Q. 10. I intended to use the term "graduated scale" as indicating a scale subdivided into uniform subdivisions by marks at regular intervals. With that understanding of the term, have I correctly understood the first step of the process?

A. You have.

Q. 11. Now, as I understand, the next step in the process is that this sheet having all the apertures marked upon it, both as to position and length, is passed to an operator who cuts the perforations according to the marks. Is that correct?

A. Yes.

Q. 12. Now, the next step, I understand is that this sheet which is now perforated and in condition to perform the function of a perforated roll in connection with the automatic player, is placed in or
on the player and actually used as a controller, and made to
447 produce the action of the player, so that the music is played according to the perforations in the sheet. Is this correct?

A. Yes.

Q. 13. Now, please explain a little more particularly just what the inspector does and how he discovers the errors, if any, in the cutting?

A. Having placed the roll upon the player and placing the score before him on a music rest and as the paper passes over the tracker board he reads the music on the score carefully, and listens at the same time for any discordant note or misplaced note. If the ear detects such note he immediately uses his scale for ascertaining the location of the same and marks the note on the perforated sheet for correction.

Q. 14. Now, when this original, with the errors thus marked for correction, goes back to the arranger, please explain just what he does, *e. g.*, if an aperture has been cut in the wrong place, what does he do about that? If an aperture is lacking in a given place by reason of having been misplaced, what does he do about that? If an aperture is too long or too short, in each case what does he do?

A. The arranger takes the sheet to be corrected and places it in

the same position as in the first process—on the table, and with the assistance of the rule or guide, formerly termed the scale, and the graduated schedule, ascertains the correct note and the correct position, correcting all such errors as indicated on the perforated sheet. Of course, in the case of a misplaced note, such note is covered by a piece of paper, gummed, and the proper note is inserted.

Q. 15. In the first process by the arranger, as I understand, he does not do any cutting, but only marks the *the* sheet; in this second process by him, does he cut the missing apertures as well as
448 paste up the misplaced ones or does he only mark them for subsequent cutting?

A. The arranger makes corrections complete, that is, he marks and cuts them ready for the inspector.

Q. 16. Now, I understand that after the original is found to be fully corrected, the sheet is used after the manner of a stencil, ink rollers being passed over it so as to ink through the apertures and mark their positions on another sheet which is to be used for master. Is that the correct understanding? If not, explain.

A. Yes.

Q. 17. Then this master, which is of suitable paper to operate in the perforating machine, I understand, is cut, *i. e.*, all the markings produced by the stencil process are cut, reproducing in the master the apertures of the corrected original, so that except as to the different character of the paper it is a *fac simile* of the original, with the further improvement over the original that by means of the calculating device which the operator uses in this last process of the cutting the alignment of the apertures is rendered more accurate than it may have been on the original which was cut without the use of the calculating device. Is that correct?

A. Yes.

Q. 18. What function does the master perform in the perforating machine,—in general, not in detail?

A. It governs the mechanism of the machine so that accurate reproductions of the master are therefrom obtained.

Q. 19. And these reproductions are the perforated rolls which it is the ultimate purpose of the whole process to manufacture, and which are used for controlling the action of the piano-player or automatic musical instrument, are they?

A. Yes.

449 Q. 20. Have you personally been accustomed to do this work of arranging which you have described?

A. Yes.

Q. 21. Do you also do the inspecting or testing by ear?

A. Whenever I have done any inspecting, that has been my method, no other being feasible.

Q. 22. In arranging in this manner from a printed score or making masters for piano-player, have you worked with a uniform scale, that is, uniform distance allowed for each line or apertures corresponding to each note to be produced, and with a uniform width of sheet or total number of apertures?

A. Yes.

Q. 23. I understand from your description that when you read from the score a given note, say A sharp in a certain octave, say above middle C, you would find the place for the aperture to produce that note by applying your rule having the graduations corresponding to the several lines or apertures upon the sheet and would thus locate the A sharp at the point in the width of the sheet at which the graduation bearing that mark stands in the length of the rule, and that you would do this for every note as you found it written on the score. Is that correct?

A. Yes.

Q. 24. From your experience and familiarity with this work, do you not become sufficiently familiar with the place in the width of the sheet of the different notes so that you could locate them by eye without resorting to your graduated rule?

A. At no time have I ever been able to accurately place a note when testing or when correcting without the assistance of the rule?

Q. 25. Are you accustomed to operating the piano-players
450 with the perforated sheets controlling them to produce music?

A. I am accustomed to playing the Apollo, *i. e.*, more familiar with it, but I have operated one or two others of the players that are on the market.

Q. 26. From your experience in operating these players with the perforated rolls, please state whether it is possible to acquire such familiarity with the rolls and with the positions of the apertures corresponding to different notes as to determine by inspection of the roll what note or notes particular apertures are designed to produce or cause to sound, or whether, in common phrase, it is possible to "read" the notes by observing the apertures?

A. From my past experience, I should say that it was not.

Q. 27. You know a great many people who are accustomed to using these players, I assume. Have you ever found any one or known any one who could thus read the music to be produced from the perforated roll intended to produce it?

A. No.

Q. 28. How do you account for the fact that this cannot be done, or that it is so exceedingly difficult that it has never been done, as far as you know?

A. Your guide is entirely taken from you. You have nothing but the plain surface, perhaps one or two apertures in sight.

Q. 29. What is the entire width of the sheet and what is the standard distance from center to center of the apertures in the Apollo player and perforated rolls?

A. The entire width of the sheet of the Apollo roll is ten and three-eighths inches covering fifty-eight apertures in the tracker board, whose standard measurement from center to center is three-sixteenths inches. Now, when covering the fifty-eight aper-
451 tures with this width of paper, every opening being out of sight, the first aperture appearing at an opening could not by any means tell the operator what note it represented, unless by mere guess work. To show how difficult such a proceeding might be, an illustration such as occurs in our office every day: On a shelf on

which are placed our music folios properly lettered, we are enabled to go directly to that folio, the letter being in plain sight to guide us. Now we will assume that before those folios hangs a curtain, the numbers or letters being previously removed from the folios and we will say for the purpose of testing such an instance or case that certain apertures be cut in the curtain or screen, we would have no means whereby to tell what folio was in view unless perchance we knew the distance separating the folios and the exact location which might be ascertained by a rule or some outward guide, that being the only possible way of directing to the proper folio.

Q. 30. How wide are the folios you speak of in this case or cabinet?

A. The folios average about three inches in width.

Q. 31. If I understand your illustration, then, it is that of a row of boxes three inches in width each, screened behind a curtain in which there is an aperture which discloses the end of one of them, in which case you suggest, it would be impossible to tell which one of the row was thus exposed, although they are three inches wide each, without measuring to find the position. Is that correct?

A. Yes.

Q. 32. In the more common construction of these piano-players and other similarly controlled musical instruments, the ducts in the tracker board or mouth-piece are arranged in regular order
452 corresponding to the regular arrangement of the keys upon the manual of a piano or organ *i. e.*, commencing with the duct which operates the lowest key at the left and proceeding regularly to the one which operates the highest key at the right. Is that correct?

A. It is.

Q. 33. Is that order of arrangement the universal or necessary one?

A. It is the one most commonly used, ordinarily termed "the straight scale," but there are others in use. For instance, there is a scale used termed the "broken scale," which is exclusively used, I believe by the Orchestrion; the purpose for which this broken scale is used is not exactly familiar to me.

Q. 34. Do you know of any reasons why manufacurers might prefer an exceptional or arbitrary arrangement rather than the so-called "straight arrangement"?

A. Well, an instrument of this nature has been manufactured by the Melville Clark Piano Company but not placed on the market, however, the reason being purely of a commercial intent.

Q. 35. What would be the advantage, from a commercial standpoint, of any manufacturer employing an arbitrary arrangement instead of the straight or regular one?

A. The idea I would get from that would be that it would be to exclude all other manufacturers of perforated rolls from producing the rolls for his particular player.

Q. 36. You mean making his instrument so that the rolls perforated for any other nstrument, would not operate them, and thus forcing the users of his instruments to buy his rolls?

A. Yes.

Q. 37. Does an irregular or arbitrary arrangement of the ducts in the tracker requiring a similar arrangement of the apertures in the perforated roll, tend to increase or diminish the difficulty of reading the notes from the apertures?

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A. Inasmuch as the arrangement of the original must be by process of rule or a scale and graduated schedule, to my mind there would be no difference.

Q. 38. You mean that it being impossible in either case it would be equally impossible in both cases?

A. Yes.

Q. 38. If you have with you, will you produce a specimen of what you have termed a "master," and also of a perforated roll made by means of that master?

A. I have and here produce a specimen master and a perforated roll cut by means of it.

The master produced by the witness is offered in evidence marked "Defendant's Exhibit Apollo Master." The perforated roll produced by the witness is offered in evidence marked "Defendant's Exhibit Specimen Roll from Master."

Q. 40. When the perforated rolls are cut for a player having what you would term "the straight" arrangement, *i. e.*, with the ducts of the tracker board commencing at the left with the lowest and ending at the right with the highest note—the position of a given aperture in the width of the sheet determines the note to be played as to what element or essential of a note, *i. e.*, understanding that a musical note has length or duration, pitch, intensity, greater or less, and other qualities which are sometimes covered under the general term of "timbre," which, if any one of these qualities is determined by the position of the perforation in the width of the sheet, in case of the straight arrangement spoken of.

A. Pitch only is determined by the position in the width of the sheet.

Q. 41. Is it possible from inspection of the apertures in a perforated sheet to determine from their length the duration of the note which will be produced?

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A. The length of the apertures would not determine, by my experience, the length of the note, as it is necessary to calculate the number of beats in the measure to get your full valuation.

Q. 42. Is it a fact, then, that in the same perforated roll, all pertaining to and adapted to produce one piece of music, two notes which in the printed score are indicated as of the same duration, as for example, both half notes or both quarter notes, as the case may be, may be produced by apertures in the roll of quite a different length?

A. It is.

Q. 43. Will you produce and point out in a perforated roll some instances of this sort, and point out on the score of the musical composition for which the roll is made, the notes corresponding to the apertures in question respectively. In doing this will you first state what is the piece of music of which you have the score and for which

you have perforated roll, and will you number the notes that you refer to on the score and apply the same numbers to the apertures on the roll which correspond to them?

A. I have a roll which has been reproduced from the score entitled "On the Promenade" by Victor Herbert. I find a few instances which I can bring to your notice: The note which I have marked "1" on the score corresponds to the aperture marked "1" on the roll; also the notes marked "2, 3 and 4" on the score correspond to the apertures "2, 3 and 4" on the roll; the lat-er three notes being of equal value. The note marked "1" is a half note and the notes marked "2, 3 and 4" are eighth notes; the notes marked "5 and 6" on the score are both quarter notes, and the apertures cor-
455 responding to them on the roll are marked "5 and 6" respectively; "7" is also a quarter note on the score, and the aperture numbered "7" on the roll corresponds to it; the note marked "8" on the score is an eighth note, and the note marked "9" is an ⅛; the corresponding apertures on the roll are marked "8" and "9" respectively. The note marked "10" on the score is a ¼ note and corresponds to the aperture marked "10" on the roll. The note marked "11" is a ¼ and corresponds to the aperture marked "11" on the roll. The aperture "1" corresponding to a half note is twenty-eight millimeters long. Aperture "2" corresponding to an eighth note, is eleven millimeters. Aperture 3 also corresponding to an eighth note, is 7 and one-half millimeters, and aperture "4" also corresponding to an eighth note, is five and one-half millimeters. If aperture "1" were of a length corresponding to aperture "4" it should be four times the length of the latter, which would make it twenty-two millimeters instead of twenty-eight as it actually is; and aperture "2" corresponding to a note of the same length as aperture "4" is twice as long as the latter. Apertures 5, 6 and 7 each corresponding to a quarter note are respectively thirteen, fifteen and one-half and eighteen millimeters in length. Apertures 8 and 9, each corresponding to an eighth note, are respectively five and nine millimeters in length. Apertures 10 and 11 each corresponding to a quarter note are respectively eight and sixteen millimeters in length.

Q. 44. How have you been able to find and identify the apertures on the rolls corresponding to the notes on the score respectively?

A. I acquainted myself with the sheet and familiarized myself with the notation and I had access to the scale. I had previously struck off points showing the measures, identifying them by num-
bers with the corresponding measures of the score.

456 Q. 45. As I understand in this way you are able to set off the perforations pertaining to each measure so that you can compare them with the notes in the corresponding measure of the score and thus pick out the aperture for each note in that measure.

A. Having divided the measures by marks indicating their length it is a matter of calculation or counting the notes from left to right in order to get the number corresponding to that of the perforated roll and the score.

Q. 46. Please explain as far as you can, the various circumstances

which affect the length of the apertures or cause the person who is arranging the perforated roll to lay out the apertures of different lengths for the purpose of producing notes which upon the original score are shown of the same length, and for making apertures which correspond to notes of different lengths out of proportion to those lengths.

A. An aperture represents at times two or three points indicated in the music; for instance a quarter note slurred to the following note or notes is given a different length from an ordinary quarter at the option of the arranger. In another case, a quarter indicated as a staccato note would be half the length of a ¼ naturally written in the music, but still of the same valuation, taking the number of beats in the measure into consideration.

Q. 47. Do I understand, then, that in such instance as the last in order to find out whether a given aperture corresponds to a quarter note or an eighth note or perhaps to a half note, it might be necessary to go over the perforated roll, and by measurement with the proper scale, find the division lines between the measures so as to find out the relation of the note to the beats in the measure?

A. Yes.

Q. 48. Mr. Leonard B. McWhood, a witness called by
457 the complainant in this case, undertook to read or ascertain the notes which the apertures at the commencement of a perforated roll given him for that purpose corresponded, and to represent those notes in ordinary staff notation. I have here that perforated roll marked "Defendant's Exhibit Perforated Roll No. 1," also marked in a label attached thereto, "No. 5, O." I will ask you to look at that roll and state if you recognize it and state if you know what musical composition it is adapted to cause to be played on the instrument for which it is made.

A. I am acquainted with the piece from having placed the label on as an identification mark, and it is so arranged for a special scale for the Apollo piano player. It is "The Mocking Bird" with variations.

Q. 49. Independently of your knowledge of that musical composition, can you tell anything about what notes the apertures at the commencement of this roll would produce on the player for which it is made?

A. I could not. There is nothing there for me to tell; there is no identification there and nothing to locate the first note; the order has been completed changed from the scale in common use.

Q. 50. Is there anything on that sheet or roll that could possibly have informed Mr. McWhood to what notes the apertures respectively corresponded, or enabled him, even by measurement, to have ascertained the note corresponding to any aperture?

A. With my knowledge of the composition I can see nothing by which he could accurately place by measurement or otherwise and properly name the apertures in question.

Q. 51. What would it be necessary to have added to this roll in

order that Mr. McWhood or any one else could even by measure-
458 urement have ascertained the pitch alone of the note corresponding to any given aperture?

A. The only way that I can see that he could have even begun to assure himself of naming any aperture would be to have placed in his hands the scale by which it was originally arranged.

Q. 52. Just what do you mean by the word "scale" in your answer?

A. The location of the notes as they followed one another from the lowest to highest aperture, *i. e.*, from left to right on the tracker board.

Q. 53. I hand you a sheet ruled for ordinary staff notation on which Mr. McWhood placed characters indicating the notes which he computed or ascertained by measurement as he thought corresponded to the first few apertures of this roll and on which he has also written his explanations of certain errors which he afterward discovered in his method of arriving at this conclusion. Please read the notes which he has written.

A. In the bass in the first chord, he has written D; in the bass clef D sharp; and F sharp in the treble; also the following chord he has written in the bass clef D natural, and in the treble clef D sharp, F sharp, G sharp, A sharp, and F sharp.

Q. 54. Will you, between the time of adjournment today and assembling tomorrow, if possible, find a copy of the score of the "Mocking Bird," as accompanying this roll and produce it here for comparison?

A. I will.

Q. 55. Please state whether you have yourself operated the player for which this roll is cut with this roll as controller of it; and if so, state whether or not it correctly produces the composition you have named.

A. I have, and it is a perfect reproduction of it.

Q. 56. Mr. McWhood has written on this score after the notes which he has placed thereon:

459 "Later: I see that I read (or calculated) the music from the roll with the roll inverted; consequently the entire score is inverted. I considered C the lowest tone, and A (four octaves and a major sixth higher) the highest note. If my measurements have been exact and if I made no error in computation, the correct chords can be obtained from what I have written by making the proper inversion."

Q. 57. Do you understand what Mr. McWhood means by "making the proper inversion," and can you do what he thus suggests, and thus obtain the notes which, according to his method, he would have written with the sheet right side out?

A. I understand and I can make the inversion as he has suggested and I am under the impression that he will be just as far off as he is at the present time in his calculations of the notes and their relative positions.

Q. 58. Will you attempt to make this inversion and when we next meet give us the result in ordinary staff notation.

A. Yes.

Adjourned until April 10th, at 11 o'clock.

April 10th. Resumed, pursuant to adjournment.

Direct examination of E. G. CLARK continued:

Q. 59. Have you made the inversion of Mr. McWhood's interpretation of the opening perforation of the roll which he undertook to read? If so, please produce it and explain what you have done and what is the result as to the notes.

A. I have taken Mr. McWhood's version of the first notes of the roll, and followed as near his ideas of inversion as possible, and have reproduced on the opposite of the sheet; first, for convenience, his arrangement followed by my inversion. As he assumed in his explanation that he had read the roll inverted, that by turning it
460 over and reading from the other side, using the intervals, and numbering them the same as he did, — I have produced the chords or series of notes, as seen in my inversion, as follows: In the bass clef I found, beginning from the lowest point, D sharp, F sharp, and in the trble clef, G. Following these notes in the chord I found, also beginning at the lowest and reading to the top of the scale, I find in the bass clef, D sharp, B, C, D sharp and F sharp, and in the treble clef, G, together with tremolo; the notes being used—this also in the treble clef—are G and B.

Q. 60. If you have the true score of the piece of music from which this roll was cut, or the opening portion of it, will you please produce it and compare the corresponding notes with those which Mr. McWhood derived or would have derived by the inversion which he suggests as shown in your last answer? By comparing the two I mean, first state what the true notes are, and then, if you find any differences other than pitch between the two notes and those which result from the inversion of Mr. McWhood's interpretation, point out those differences, either as to relative duration or as to intervals.

A. I have here the score upon which are placed Mr. McWhood's own interpretation, the inversion of same by myself, according to his instructions, together, upon the opposite page, a portion of the true score as it should read; and comparing the two, I find that in the first place, the value of the first notes are wrong, the real value being a- eighth note, Mr. McWhood, deciding that it must be a quarter. The following notes were dotted quarters in their real value, whereas Mr. WcWhood considered the valuation a half note. I also find that the intervals in the proper inversion, according to his instructions, would read, beginning at the lowest and following up to the highest note appearing on the staff, such intervals beginning "1" 15-41; and in the following chord, the intervals
461 would in the bass clef, 1-9-11-13-15; the following intervals are in the treble clef; 41-45 and 53, the two latter intervals being used in the tremolo. The interval 41 in the foregoing chord preceding the one just indicated, should have read the 41st interval

in the treble clef. Passing to the correct score, the intervals properly used should read: 1-13 in the bass clef and 24 in the treble clef. The chord following should read: 1-8-13 and 16 in the bass clef, and 24-28-31 and 36 in the treble clef the interval 36 being used as the trill with a full tone above to assist in the trill.

Q. 61. I understand, then, that you find that beside being unable to determine the pitch of the notes which the several apertures would produce, because the roll contained no information as to the order of the tones, also, as to duration of the tones and as to the intervals between them, Mr. McWhood, even by measurement, was unable to come to a correct conclusion.

A. Yes.

Q. 62. Have you made the specimen pieces of original and masters to illustrate your testimony yesterday? If so, please produce them and explain them.

A. I have here the piece entitled "My Indiana Hannah," a small selection of which appears in the perforated sheet to illustrate the process undergone to produce a sheet ready for the player, the score being the first sheet necessary. I enclosed in brackets the portion which I have arranged for the perforated sheet. On the first paper which I have here I have marked the "first step" indicating the marking taken directly from the score made by the arranger, followed by sheet marked "second step" wherein the marking has been cut out by process producing the apertures controlling the mechanism of the player, together with the correction marks placed there
462 by the inspector. On sheet No. 3, which is marked "third step" appears the perforations with the corrections made according to the marks of the inspector. On sheet No. 4 marked "fourth step" the perforations appear as corrected and O. K.'d by the inspector, which sheet was used for final steneil transferring the perforations to a master or templet paper by the process of ink rollers. I also have here the master or templet paper marked "fifth step" upon which appear the perforations as steneiled thereon before being cut out. On the sheet also which is templet paper marked "sixth step" we have the completed copy of the original, apertures being cut out ready for production of rolls.

The sheets produced by the witness in his last answer are offered in evidence, marked "Defendant's Exhibit Score of Specimen Master, Originals First Step, Second Step, Third Step and Fourth Step, respectively, and Templets, Fifth Step and Sixth Step, respectively."

Cross-examination by Mr. BROWN:

X Q. 63. On the score just referred to and produced by you, which I will call "Exhibit Score," I note the copyright imprint or notice, "Copyright MCMI by Chas. K. Harris." Is this particular composition one of those perforated rolls of which are manufactured and offered for sale by you or your concern?

A. Yes.

X Q. 64. When first describing your method of roll production you spoke of making use in the preparation of the exhibit "first

step" of a rule or guide upon which are marked at regular intervals the letters of the scale and their relative octaves to guide the arranger in placing the note or notes in their proper position. Can you produce or reproduce such a rule or guide in accordance
463 with which the lead pencil markings of exhibit "first step" were located?

A. I will make a reproduction and produce it.

X Q. 65. On the rule or guide which is used in practice in preparing these exhibit "first step" pencil marked sheets, are there any marks other than the graduations, *i. e.*, any marks corresponding to the ordinary scale notation from A to G?

A. Our scale extends from C to A, C being the lower and A the highest note, and on this guide, in addition to the regular lettered graduations, appear the lines designating the octaves.

X Q. 66. What provision on the scale or otherwise is made for the location of the pencil marks corresponding to what I should term accidentals?

A. The scale is marked in chromatic graduations therefore taking full and half steps or intervals.

X Q. 67. Do I correctly understand the process whereby this ordinary notation of "Exhibit Score" is, if I may use the word, translated into the collection of pencil lines shown on the "Exhibit First Step." It would follow, would it not, that if I had a first step sheet or roll of a composition with which I was not familiar, and if I carefully applied thereto the rule or guide we have been speaking of, by which the marks in pencil were located, I could retranslate the composition back into the ordinary staff notation, so far as the notes themselves are concerned, but could not in all cases do this correctly, so far as the duration of certain of those notes is concerned. Am I right so far?

A. Yes.

X Q. 68. Now, taking again your very full description of the process, I find that you say that in addition to the rule or guide "a graduated schedule is used in producing the desired length
464 of the note or rest and to ascertain other marks which are indicated by the score." I should be glad if you would give the court an idea of what the thing is which you speak of as "a graduated schedule."

A. This is a device which is exclusively used in our business and is not for public exhibition, and I therefore am unwilling to describe it more fully.

X Q. 69. What did you mean when you spoke of "other marks which are indicated in the score"?

A. In speaking of other marks in connection with the notes I had reference to dots which would mean in one instance that a note was half again as long, or if a dot was placed in another position would mean half the length, or marks known as "slurs," or "ties," or "turn," "trills," etc.

X Q. 70. How would you indicate upon the perforated roll the marks or phrases "moderato con expressione," and "mp" and "rit," which occur in the bracketed passage in the "Exhibit Score," and

would such indications be placed upon the paper or sheet corresponding to "Exhibit First Step"?

A. The expression marks which you have mentioned in the question are placed upon the paper by a process separate from the ordinary arranging, with the exception of the ritards, which may be either represented in the music, being placed there at the option of the arranger, or again resorting to the separate process of placing expression marks on the sheet.

X Q. 71. Will you please describe briefly what this separate process is that you speak of?

A. This separate process is done by what we term "stenciling" or, in other words, by the use of rubber stamps placed in their proper positions relative to the music.

X Q. 72. On the "Complainant's Exhibit No. 10" is pasted a brown paper label with black printing as follows: "3192, Ken-
465 tucky Babe Schottische, Geibel, Q. R. S. Co., Chicago, Ill., U. S. A." Do you know the Q. R. S. Company of Chicago?

A. Yes.

X Q. 73. Are you connected with it?

A. Yes.

X Q. 74. In what capacity?

A. As manager.

X Q. 75. What is its business?

A. Manufacturing of perforated music for the Melville Clark Piano Company.

X Q. 76. And when you gave your occupation as manufacturer of perforated rolls for musical instruments, did you refer to the work done by you as manager of the Q. R. S. Company?

A. Yes.

X Q. 77. On this exhibit roll I find stenciled "MF Moderator" in purple ink. Is this a sample of the way in which the expression marks occurring in the score are reproduced upon the rolls manufactured by you?

A. It was at that time. As I stated, we now use rubber stamp instead of a stencil.

X Q. 78. The bracket portion of the exhibit "score" also contains certain dynamic marks. In what way are these dynamic marks reproduced upon the perforated roll, by whom are they edited, and at what stage in the preparation of the finished product do they first appear? In this connection I note upon "Complainant's Exhibit No. 10" a row of purple dots extending from one end of the sheet or roll to the other, but at times changing its position laterally thereon. If this is the method of indicating the dynamics of the piece, now followed by you, you may so state.

A. The marks which you have called attention to and which you find expressed on the roll are placed there previous to their
466 becoming attached to the spool, and is in use at the present time in the manufacture of these perforated rolls by us. I would also like to add, in answer to the foregoing question, that a diagram is laid out by one informed producing a pattern therefrom which is used in the production of such lines as heretofore stated.

X Q. 79. At what stage in the process which results in the complete and marketable perforated rolls, is this diagram prepared?

A. This diagram is prepared immediately after the inspection of the original, the same being tried on the player, and often, if marks are insufficient to express enough to the performer, original ideas by the expert are added.

X Q. 80. Then the score plays the following part in the production of the finished and marketable perforated roll, to wit:

First, it plays the part which you have already described in connection with the delineation of the pencil marks on the sheet, "Exhibit First Step."

Second, substantially at the same time with the inspection, the results of which are shown by the corrections indicated by the pencil marks on the sheet, "Exhibit Second Step," the score is again referred to; the dynamic marks contained in it are reproduced or reindicated by means of the diagram, and in some cases additional dynamic marks are indicated in diagram, where, in the judgment of your experts, the original score is deficient.

Third, the score is again made use of just before the completed perforated roll is to be attached to the wooden cylinder, and the expression marks of the score are reproduced upon the roll by a rubber stamp, stencil or other form of printing.

Have I stated these matters correctly?

A. Yes.

467 X Q. 81. On the "Exhibit First Step" at the right-hand edge thereof, I notice that the sheet is divided by transverse pencil marks at substantially equal distances apart. I also notice that the bracketed portion of the "Exhibit Score" contains four bars or measures. Am I right in the assumption that the divisions on the "Exhibit First Step," which I have mentioned and which are also numbered in pencil 1, 2, 3, 4, correspond to the bars of the bracketed portion of the "Exhibit Score"?

A. Yes.

X Q. 82. Is such subdivision and enumeration practiced in the preparation of all lead pencil marked sheets constituting the first step of your process of producing perforated rolls?

A. Yes.

X Q. 83. Am I right in assuming that one object of doing this is to guard against the accidental omission of a measure or measures of the original composition, as set out in the original score?

A. It is, as it is also necessary as a guide in referring back to the score for any particular reason.

X Q. 84. What consideration determines the length of these subdivisions, corresponding, as stated, to the measures of the score?

A. In any given piece, it is at the discretion of the arranger, the length of measures.

X Q. 85. Coming now to the process represented by the sheet "Exhibit Second Step," omitting for the present the inspection and correction, I notice that some of these perforations have smooth edges and others corrugated edges. How does this happen?

A. In the operation of cutting out the aperture the operator has

in use either a hand punch or a knife by which the cuttings are made; therefore the knife making the smooth edge and the punch the corrugated.

468 X Q. 86. What determines the selection by the operator of the knife or the hand punch for the production of any particular perforation or aperture?

A. The one cutting the apertures uses the punch if they feel that they can use it equally as well, and often the knife relieves the action of the hand, the hand becoming tired from the use of the punch.

X Q. 87. And there is no other significance in the fact that of the perforations in the "Exhibit Second Step" some have smooth sides and some corrugated?

A. No.

X Q. 88. In the matters we have thus far considered, to wit, the use of the printed or other original score, the placing of the pencil marks on the paper, as shown by "Exhibit First Step," and the subsequent perforation of the paper accordingly, as shown by the "Exhibit Second Step," will you tell me whether this is in any way peculiar to your concern, or whether it is, as you understand it, the method commonly followed by manufacturers of these perforated rolls? I have fully in mind the fact that the use of a graduated schedule is regarded by you as peculiar to your own concern.

A. I consider this process entirely original with us. I don't know what process others use.

X Q. 89. We come now to the sheet "Exhibit Third Step," in which, if I may so express it the proof errors noted on sheet "Second Step" have been corrected. Am I right in assuming that the object of these corrections is to make the perforations found in sheet "Exhibit Third Step" in its final or corrected form, as likewise the perforations in sheet "Exhibit Fourth Step" or "O. K. Sheet," correspond precisely in all respects with the lines drawn in pencil upon the sheet "First Step" by the hand of the person whom you have spoken of as the arranger, always, of course, excepting such errors as

469 he may have made in his work, which errors have been corrected by the inspector as stated?

A. Yes.

X Q. 90. We come now to the sheets "Exhibit Fifth Step" and "Sixth Step." I notice these are formed upon stouter paper, and that the sheets are provided with the customary perforations along the edges, whereby the sheet "Sixth Step" is caused to travel mechanically through a perforating machine, and in this way the completed or commercial perforated sheet is mechanically produced, so far as its perforations are concerned. I would ask you what, in practice, is done with the various structures or things produced in the various steps represented by the exhibits Nos. 1 to 6, after the desired number of copies, or, if I may so call it, the desired edition of perforated sheets, has been produced by the perforating machine. Are any of the sheets preceding the final sheet preserved; and, if so, which one or ones?

A. We preserve the original, which, in the exhibits is labeled "Fourth Step," as well as the master, which is marked "Sixth Step."

The original is kept for future reference, the master being in constant use for reproduction of rolls by the perforating machine.

X Q. 91. That I may be sure that I am clear in my understanding, I will say that by the original in your last answer you refer to the thin sheet which has passed through the steps represented separately by exhibits 1 to 4, inclusive, and by the master you refer to the sheet of thick paper which has been through the process represented by exhibits marked "Fifth Step" and "Sixth Step." Am I correct?

A. Yes.

470 Cross-examination by Mr. RAEGENER:

X Q. 92. Who is the Q. R. S. Company?

A. The Q. R. S. Company is a corporation incorporated under the laws of the State of Illinois.

X Q. 93. Do I understand that its entire output of perforated music rolls are sold to the Melville Clark Piano Company?

A. Yes.

X Q. 94. That is a corporation incorporated under the laws of the State of Illinois, is it not?

A. I presume so.

X Q. 95. Mr. Melville Clark, your brother, is the president of the last named corporation?

A. I so understand.

X Q. 96. I show "Complainant's Exhibit No. 12," marked "4559, Little Cotton Dolly, Plantation Lullaby, key of C, A. Geibel, Q. R. S. Co., Chicago, Ill., U. S. A.," and likewise "Complainant's Exhibit No. 10," "3192, Kentucky Babe Schottische, Geibel, Q. R. S. Co., Chicago, Ill., U. S. A.," and ask you whether these two rolls are made by your company, the Q. R. S. Company, of which you are manager?

A. As far as I can see, they look like our production. I believe they were made by us.

X Q. 97. And they were made substantially by the processes heretofore described by you?

A. Yes.

X Q. 98. I show you a catalogue of music for the Apollo and Apollo grand piano-player, having the name "Melville Clark Piano Company" thereon, and ask you whether the Q. R. S. Company publishes that catalogue?

A. Yes, the Q. R. S. Company are responsible for the catalogue in question.

471 The catalogue is offered in evidence, "Complainant's Exhibit Apollo Catalogue of this date."

X Q. 99. I show you likewise another catalogue marked "First Quarterly Supplement of Music, 1903," which bears the imprint "Q. R. S. Co., Manufacturers of Perforated Music." I assume that the Q. R. S. Company has also published that catalogue.

A. They did.

The same is offered in evidence and marked "Complainant's Exhibit First Quarterly Supplement of Music, 1903, for the Apollo."

X Q. 100. Who furnishes the Q. R. S. Company with the scores from which the perforated rolls for the Apollo Company, the defendant herein, are made?

A. We buy many of them, and large numbers have been forwarded to us by various publishers; for instance, the exhibit score entitled "My Indiana Hannah" was forwarded, with a number of others, to us from the Charles Harris Publishing Company, with a request that we cut the same, if desirable.

X Q. 101. What I wanted to know more particularly was whether the defendant, The Apollo Company, sent you the scores of music with the request or direction to make perforated rolls therefrom, or whether, in the first instance, you, of your own accord, made perforated rolls and thereafter the Apollo Company bought such of them as it saw fit.

A. Much of the music in score is forwarded to the Melville Clark Piano Company by agents who, by the way, are, many of them, publishers themselves, with the direct request that they be cut, they in turn being willing to take a fair proportion of the first cutting. This mu ic, all of which is placed on the market, and to a great many of the agents rolls of every description are sent without re-
472 serve, they using their discretion in reordering from the same.

X Q. 102. Does the Q. R. S. Company make perforated rolls for other piano-players besides the Apollo and Apollo grand?

A. Not at the present time.

X Q. 103. Then I take it that all the perforated music rolls made by the Q. R. S. Company are made with a view to their being used in the Apollo and Apollo grand?

A. Yes.

X Q. 104. Who handles the Apollo and Apollo grand; who sells it?

A. The Melville Clark Piano Company and their representatives.

X Q. 105. What relation, in a general way, has the defendant, The Apollo Company, of New York, to the instrument known as the Apollo and Apollo Grand?

A. The Apollo Company of New York, which you mention, are the eastern representatives of the Melville Clark Piano Company, to handle the Apollo piano-player.

X Q. 106. Are there other similar Apollo companies who represent the Melville Clark Piano Company in other cities?

A. I understand there is a new organization in Boston, but cannot plainly state the name of the company in full. There is also one called the Clark Apollo Company, of London, England.

X Q. 107. These companies just referred to by you handle the Apollo and Apollo grand?

A. They do.

X Q. 108. Where does the Apollo Company of New York get these perforated rolls made by the Q. R. S. Company?

A. From the Melville Clark Piano Company of Chicago.

473 X Q. 109. The Q. R. S. Company, then, does not directly sell any of the perforated rolls to the public; it sells solely to the Melville Clark Piano Company?

A. Yes.

X Q. 110. Does the Q. R. S. Company invoice perforated rolls to the Apollo Company of New York?

A. No.

X Q. 111. The Q. R. S. Company does not invoice the perforated rolls to any one except the Melville Clark Piano Company?

A. No.

X Q. 112. Do you know whether the rolls made by the Q. R. S. Company fit the "Kimball"?

A. They do not.

X Q. 113. Do the rolls made by the Q. R. S. Company fit the "Pianola"?

A. No.

X Q. 114. Are you a director of the Melville Clark Piano Company?

A. Yes.

X Q. 115. Is Mr. Melville Clark, your brother, a director in the Q. R. S. Company?

A. He is not.

Redirect examination by Mr. BURTON:

R. D. Q. 116. Referring to your answer to X Q. 70, wherein you state that the expression marks "ritards" may either be represented in the music, at the option of the arranger, or may be placed by separate process on the sheet, please explain how "ritards" or any other modification of speed or "tempo" are represented or embodied in the perforated sheet by the arranger?

A. The expression "ritard" placed on the music naturally impresses the performer that at this point he is to slacken or de-
474 crease the speed or "tempo" of the composition; and if so indicated by marks on the music, such operation will be performed by the motive power of the machine; otherwise the one arranging the composition or perforated sheet would gradually elongate the notes in such instances as the marks would indicate, thereby elongating the entire measure up to the point wherein the word "tempo" or such term might be used to indicate the resumption of the former tempo.

R. D. Q. 117. Then am I to understand that when the arranger undertakes to embody the characteristic indicated by the tempo marks in his arrangement of the perforations of the roll, a slower tempo would result in longer apertures for notes of the same indicated length on the score, and a more rapid tempo would result in shorter apertures for the notes of the same indicated length; is that correct?

A. In referring to the ritard, for instance, we will say the measures consist of quarter notes; the first note in the first measure, which we will number "1," will be of the duration called for by the note represented on the staff, and each succeeding note might gradually become a longer aperture until the last note in the measure, which we may number "2," might be twice, or may be three times the length of the first quarter; at the same time nothing on the staff

would indicate that it is anything less than a quarter or more than a quarter.

R. D. Q. 118. For the purpose of condensing or shortening the total length of a roll, does the arranger for a piece which in fact is to have a rapid movement, ever adopt shorter apertures than customary, and indicate a moderate time by the marginal rubber stamp mark?

A. All scores are carefully scrutinized by the one who arranges the composition, and the notes or the length of the aperture most consistent thereto, are used. The terms "moderato," etc., are
475 used in connection with these compositions as compositions as they are placed on the score.

R. D. Q. 119. Referring to the matter of scores which are sent to the Melville Clark Piano Company, or to your company, by publishers of music, such as the Harris Company, which you mentioned, what is your understanding of the ground upon which they request to have the music cut, that is, to have perforated rolls made to play the music of their scores, that is, why do they desire it?

A. I do not know of any other reason in regard to the Harris Publishing Company other than that they were anxious to have them reproduced in this form. I might quote Mr. Harris, through Mr. Flanner, our agent in Milwaukee, in whose store Mr. Harris listened to the Apollo player and heard several of his compositions which had been procured through their selling agents, and realized what it meant to have compositions from his house placed before the public in such form. His letter to the Melville Clark Piano Company, if I can recall it, was of a very enthusiastic nature, and was almost an appeal that these compositions be reproduced for the player.

R. D. Q. 120. Why?

A. Because of the bringing of the compositions before the people who are listening daily to these piano-players now being largely sold to the general public, and of the careful rendition of the compositions, some of which are made more complete than ordinarily played, which makes them, to the observing listener, a desirable composition to have in the household.

R. D. Q. 121. You understand that these publishers seek to have perforated rolls made for their music because they believe that the demand for the music which they publish will thereby be created or increased?

Objected to as calling for hearsay, and not the best evidence.

476 A. I cannot say that all publishers are of this mind, but those who have come in direct communication and have had the pleasure of having many of their compositions reproduced have seen and recognized the feasibility of placing their works in the hands of the perforated roll manufacturers, particularly of those who are manufacturing the most perfect instrument.

Adjourned until April 11th.

April 11th, 1903.—Resumed pursuant to adjournment. Present, counsel as before.

Mr. GEO. SCHLEIFFARTH, witness called on behalf of the defendant, being sworn, testified as follows:

Q. 1. What is your name, age, residence and occupation?

A. George Schleiffarth; fifty-four years; Chicago. I am a musician, composer, publisher, pianist; in fact, I am connected with the W. W. Kimball Company as a pianist and in a musical capacity generally.

Q. 2. Please state how long you have devoted yourself to music as a composer and otherwise, and if you are willing, mention some of your original compositions which are most generally known, and state, in a general way, the extent of your work as a musical composer.

A. I have been writing music for thirty-seven years, have written about 1,500 copyrighted compositions, several comic operas and innumerable musical sketches of all sorts. I have also published some music personally and have now compositions with nearly all the leading publishers in the United States. My best known compositions are "Doris," "Ambolena Snow," "Douglas Club Two Step," "Who Will Buy My Roses Red?" and the comic opera "Rosita," which has been playing for about twelve years. I have also
477 a song which has been sung all over the country called "Pauline." I have also arranged numerous marches for brass bands and orchestras, and have been connected with musical people all these years, meaning by that that I have been among professional people all these years.

Q. 3. Are you familiar with automatic piano-players and with the perforated sheets or rolls by which they are controlled, and with the use of the same?

A. I am.

Q. 4. Have you had occasion and opportunity, as a composer and in your other musical capacity, to observe, and have you observed the effect of the introduction and increasing use of these automatic players and automatic musical instruments using similar perforated rolls to control them upon the demand for and sale of the musical compositions in their usual form of notation; as in sheet music or published musical scores; if so, please state what conclusion your observation and experience has led you to form as to such effect and give your reasons for the same; state as fully and particularly as you are able?

A. Ever since I have entered the market as a composer, wishing to gain as much popularity as possible, I have looked about how I could best obtain this popularity. Advertising in newspapers and by circulars and other advertising means, I have found but little successful. In order to get my songs, songs especially, a hearing, so that the people would become acquainted with them and go to the publishers and buy a copy, I had to hire men or women to sing them in public. I consider the virtual and active success in any musical composition the pounding it into the masses by letting them hear it, and this whether done by mouth or by whistling or through a graphophone or with a perforated roll on the street cor-

ner played by some blind woman, was my greatest wish and
478 ambition. I consider that means for the composer used in that direction to get his music known, center in this one point, to have them played and made known to the public. Therefore, I do not see why the production of music played by the graphophone or by the so-called piano or music rolls (call them whatever you like) could be detrimental to the composer; and as the composer is anxious to be known, I have often asked my publishers to allow the reproduction of my compositions on graphophones and self-playing devices.

Q. 5. Is it your actual observation that the demand for the sheet music is created and stimulated so that the sale thereof is increased by having the musical compositions played by the piano-players and other self-playing instruments, and that the cutting of the perforated rolls for a given musical composition and the selling of such rolls with and for the piano-players does increase the demand for the sheet music?

A. As I am not in the sheet music business on such a scale that I could judge to what extent it has increased, I still claim from knowing the amount of music sold in the United States to-day, especially in the popular composition line, it is stimulated by all self-playing devices. For example, I would sit at a piano-player and play a catchy melody; six or eight people standing around me will immediately ask—or some of them will—what is this tune you are playing, and I know from personal knowledge that many copies, especially of my own compositions, which are cut for self-players, have been bought in sheet music form on account of my playing them on the machine.

Q. 6. From your familiarity with the self-players and the perforated rolls for them, please state whether it is possible for the perforated rolls to take the place or answer the purpose of the sheet music for guiding a singer or a performer on the piano or organ in singing or playing a piece, and give your reasons for your answer.

479 A. It is utterly impossible to confound the two. One is music and the other is a piece of paper with holes in it, which nobody can read and never will be able to read, and cannot be used for any other purpose than what it is cut for, especially since the musical notation has been taught to us for hundreds of years and can be easily read by children, whereas the most accomplished musician, mathematician or whatever you may call him, cannot read holes in paper.

Cross-examination by Mr. RAEGENER:

X Q. 7. Are you the Geo. Schleiffarth enumerated in the composers' list referred to in the catalogue of music published by the Melville Clark Piano Company? I show you "Complainant's Exhibit Apollo Catalogue."

A. Yes, sir.

X Q. 8. I observe that four of your musical compositions are re-

ferred to in this catalogue and appear to be published by the Melville Clark Piano Company. That is correct, is it not?

A. Yes, sir.

X Q. 9. Are these four publications among those which you consider as the most popular of your compositions?

A. I would not say the most, though the Cadet Two-Step has had an enormous sale; as I understand, over 50,000 copies.

X Q. 10. Do you get a royalty from the publishers of your musical compositions?

A. Most of my compositions were outright sales. In fact, I have written more to order than on my own personal account. I have a few now running on royalty, but not being able to write the style of music popular now, such as coon songs and cake walks, I have not been as popular as I was before.

480 X Q. 11. Please name a few of the musical compositions for the publication of which you receive royalty.

A. The largest royalty I have ever received was on the song "Doris," which netted me about $4,000. On "Who Will Buy My Roses Red," which sold over 100,000 copies, I was able to collect $100. And I found in my thirty-odd years of public service in the musical composition line that the publisher was more willing to pay me $10 for manuscript than let it be published on royalty.

X Q. 12. Would you as a composer seriously object to receive a royalty from the publishers of music rolls publishing your musical compositions?

A. Of course not.

X Q. 13. From the author's or composer's point of view, do you know any reason why the publisher or the person desirous of enjoying a musical composition written by you, should not contribute to your material welfare by paying you some compensation, even if the publication is in the shape of a perforated music roll?

A. I see no reason.

X Q. 14. Because for many years past publishers have deprived authors and composers of their just compensation, and I have special reference to authors and composers receiving royalties for the publication of their compositions in the form of sheet music, and because in the past such publishers have not compensated authors in paying them a royalty upon the publication of compositions in the form of music rolls, can you see any reason why they should not do so in future?

A. No.

X Q. 15. Now, you have used the expression "one is music and the other is a piece of paper with holes in it." Don't you mean to say that in the one case the record of the musical composition
481 is in the form of a printed sheet and in the other case the record of the musical composition is in the form of a perforated sheet; the former musicians can read readily; the latter they cannot read; is that so?

A. I mean to say, as I explained in my former testimony, that we are taught—that from childhood up we have been taught to consider five lines and the musical notations thereon in the form of

notes, with all the accompanying signs, such as sharps and flats thereon and rests, and written or printed in that shape as music. All other devices we have not been taught to accept as such, and on that footing I stand to-day because I do not know any better.

X Q. 16. Do you not, as a matter of fact, confound the hieroglyphics which designate sounds for the sounds themselves? Surely you do not mean that the signs "sharps," "flats" and hieroglyphics of that kind are "music." These signs only indicate, do they not, to a player what music is to be produced for the ear to hear?

A. In this particular regard I wish to state that a piece of music does not have to be played to a musician to hear it. In fact, when I write my compositions I need no piano nor violin nor any other instrument. I hear this music in my head while I am reading the score.

X Q. 17. How is it with the great multitude—ninety per cent. of the hundreds of thousands of people who have purchased copies of your musical compositions in the shape of printed sheets? Are they likewise able by looking at the hieroglyphics to hear the music in their minds or must they hear the sounds in order to enjoy your musical compositions?

A. I should say that this point is rather exquisitely taken, since hundreds of people buy this music, especially songs, and have
482 no musical instrument of any kind at home. It is not necessary that those people should have been taught the melody, but by glancing over the page, and having from school room up been taught to learn reading at sight, and as the musical education of today is so perfect that a human being having been taught sight reading can reproduce these notes on the paper, apparently in their brain without going to a piano. I have such evidences almost daily. When I give to a raw recruit in the musical profession a professional copy of one of my songs, tell her to learn the words and the melody the best way she can, having no piano at the house nor no one to teach her, she has from practice, looking over manuscripts and such professional sheets, received a general idea of where the notes are placed on the paper and the corresponding tone in her head.

X Q. 18. Does the same statement hold good with regard to the majority of piano-players playing musical compositions from records in the form of sheet music? Do you mean to say that the majority of people who own pianos and play thereon can hear a musical composition without the aid of the instrument?

A. I should say that all students of music and young people now receiving musical education are more or less able to do so, since sight reading and sight singing is one of the most important branches in our colleges. Of course, I am only speaking of musicians now and musical students and I appreciate that there are thousands who cannot do it.

X Q. 19. I suppose that to you, as a skillful musician, it would not be difficult to read the perforations upon the music rolls published by your company if you knew the key and if you devoted several weeks or months of study to the system used by your com-

pany in transferring the score from the printed sheet music to the perforated roll.

483 A. I have never been much of a mathematical or mechanical genius and I presume if I were to make this a part of my study I would probably be able to do as well as others who work in this business. I have tried hard to take up a roll and decipher what piece it might be. One of our young men in the store and myself have tried to cut one, but gave it up as being unable to accomplish our effort.

X Q. 20. What is the practical musical purpose of the music rolls sold by your company?

A. I do not know, as it is not in my department or field; I am not familiar with it.

Redirect examination by Mr. BURTON:

R. D. Q. 21. Referring to the fact which you stated that most of your musical compositions you have sold outright to the publishers, I understand that you mean that you sold to them the right to take the copyright or that you sold them the copyright, and that such publishers own those copyrights.

A. Yes.

R. D. Q. 22. I inferred from your statements in that regard that you received usually what you regard as very small compensation or price for a great many of your compositions thus sold. Will you give some instances of this sort, illustrating the disparity between the price you received and the popularity, in sales, of the pieces respectively?

A. My first great success, "Careless Elegance," which I published on royalty twenty-eight years ago and which is still selling to-day, netted me $11. My great song, "Who Will Buy My Roses Red," which sold 100,000 copies, netted me $83. My great composition, "The World's Exposition March," $5. The Cadet Two-Step (50,000 copies sold), $4. And so I may go on *ad infinitum*. Out

484 of 1,500 compositions I have probably earned $5,000.

R. D. Q. 23. Do you know of any reason why the publisher who pays you $4, $5 or $10 for the copyright of a song which earns for him as many thousand dollars, should have, in addition to the monopoly of the publication which continues to earn him a revenue, the further means of deriving an income from that which is bought from you for a trifle which he would have if he should be held by virtue of his copyright entitled to a monopoly also in the making of perforated rolls for that composition, giving him thus another source of revenue at your expense?

A. I should say not.

PETER C. LUTKIN, witness called on behalf of the defendant, being duly sworn, testified as follows:

Q. 1. Please state your name, age, residence and occupation.

A. Peter C. Lutkin; forty-five years of age; 1724 Asbury avenue, Evanston; dean of the School of Music, Northwestern University.

Q. 2. How long have you been engaged in work relating to music?

A. At the age of twelve I was organist in the Episcopal Cathedral, Chicago. I occupied that position until 1881, when I went to Europe, where I studied under the leading masters of Berlin and Vienna. I returned to Chicago in 1884, and was organist in St. Clements Church for six years; then of St. James Church six years. I was connected with the American Conservatory of Music; I was at the head of the theoretical department from 1886 until 1891. At this time I was appointed musical director of the School of Music, Northwestern University, the position I have since occupied.

485 Q. 3. Do you compose music to any extent?

A. I do at irregular intervals, more particularly church music, some of which has been published in Chicago, some in New York and some in London.

Q. 4. Have you in mind the rate of growth in respect to pupils in attendance in the school of music for which you are dean, for five or six years back; and, if so, will you kindly give us the facts in general?

A. I have the statistics for the past five years. The attendance in the school of music for the year 1898-9 was 248. For the next year 297. The next 348. For the next 366. For the present year 460. The figures for the present year are an underestimate rather than an over-estimate, as the year is not yet closed. Actual number is 453 to date, but will probably run to 475.

Q. 5. In the conduct of this department, is it the practice of the school to provide the pupils with such sheet music as their work requires, either in whole or in part?

A. A large majority of the students buy their sheet music from us.

Q. 6. About what is the amount of sheet music sold by the institution per capita, and state whether or not it very materially varies during the five years for which you have stated the attendance, *i. e.*, whether the amount per capita varies?

A. The amount per capita per annum is in the neighborhood of $2, and I do not think this varies to any considerable extent.

Q. 7. Please state what is necessary to constitute a copy of a musical composition in any system of notation and what any system must be adapted to show in order to constitute a proper system of notation of musical composition.

A. In the visual presentation of music it is necessary that
486 the pitch be accurately designated, the duration and certain indications as to the manner of performance.

Q. 8. Will you please mention some of the different indications as to the manner of performance and the characteristics of performance which they are used to indicate, respectively?

A. At the beginning of a piece of music there is usually an Italian term to indicate the general rate of speed, and the manner of performance of individual notes or chords may be qualified by staccato marks or legato phrases, semi-staccato marks, the portamento, etc. Slurs, ties, holds and in the case of piano music, pedal marks are also used. Furthermore, there are accents, sforzandos,

marks indicating the degree of force and bar marks to indicate the rythmical divisions; also at the beginning there is an indication of the rythmical movement of the composition, popularly known as the kind of time.

Q. 9. Are you familiar to any extent with the automatic instruments commonly known as piano-players, or with other automatic musical instruments in which the sound-producing devices are controlled by perforated sheets or rolls so as automatically to produce the musical composition for which the sheet or roll is perforated?

A. Fairly so.

Q. 10. From your familiarity with these instruments and perforated rolls pertaining to them, please state whether the latter—the rolls—constitute a copy or notation of the musical composition which may be produced on the musical instrument by the use of them, which can be practically used to perform the ordinary function of the copy or visual notation of such composition.

A. I think they are of no practical value whatever, except for the direct purpose for which they are intended.

487 Q. 11. You mean except for the purpose of mechanically controlling the action of the instrument?

A. Yes.

Q. 12. Will you please give your reasons for this opinion?

A. As far as my investigations go, the perforated roll represents no definite pitch to the eye, nor is there any indication of the time, nor are many of the minute details of the printed copy indicated, in a manner capable of reproduction.

Q. 13. In case of the perforated roll in which the arrangement is what is commonly called a straight or regular arrangement, *i. e.*, that the perforations commencing at the extreme left and proceeding to the extreme right, correspond to the notes commencing from some determined point in the bass and proceeding to some determined point in the treble, *i. e.*, in regular chromatic order, why do you consider that the slots or perforations do not represent definite pitch to the eye?

A. Because, beyond the first few notes it would involve a mental process so complex that it would be of no practical value whatever.

Q. 14. Can you state a little more definitely what you conceive to be the difficulty in the mental process necessary to locate any given note?

A. Because there is nothing to guide the eye definitely as to its location, such as one has in reading notes from the printed staff.

Q. 15. Please go on and make the comparison between the printed staff and the perforated roll in the respect you have mentioned, somewhat more in detail?

A. On the printed staff the eye is accustomed to group the notes employed in music in octaves. These octaves are determined by certain locations in the staff. The eye is guided to recognize
488 these places by the position on the staff in regard to the relation of the lines and spaces, and the addition of what are called "added lines." In other words, the distance is measured off by these lines and spaces and gives a fixed location to each and every

note. On the other hand, with a perforated sheet the eye would have to identify a certain note selected from some eighty others, with no guide to its identity beyond its distance from or proximity to one side or other of the roll.

Q. 16. Is the use of the five-line staff employed in the more common system of notation entirely arbitrary or is it the result of experience as to the range and number of subdivisions which the human eye can practically recognize and distinguish at a glance?

A. There is no doubt that the universal custom of employing five lines is the result of experience which has demonstrated that that is the maximum number which the eye can readily grasp and identify locations on.

Q. 17. Can you state any facts in the history of the development of this notation which indicates this?

A. The beginning of staff notation consisted of but one line, and either words or other characters were used above and below this line to indicate the differences in pitch. As this was indefinite, other lines were added to the number of three, making four in all, and the four-line staff was long in use, more particularly in ecclesiastical music. In the instrumental development of music, more especially violin, it was found more convenient to add still another line, and no attempt has been made to enlarge this, at least to my knowledge.

Q. 18. If it is a fact that in the perforated rolls, as actually cut and as properly cut for the proper reproduction of the musical composition, according to good musical judgment, the notes which in the ordinary staff notation are the same indicated length, as quarter notes or half notes or eighth notes, as the case may be, are
489 provided for by slots of widely different length, so that one-quarter note may have corresponding to it in the roll a slot of five-sixteenths of an inch, while another quarter note may have a slot of five-eighths of an inch length; does the perforated roll fulfill another of the essential requirements of a copy or notation of the musical composition, to wit, indication of duration of the tones?

A. Under these conditions, I should say that one would be easily misled as to the original presentation of these notes in the printed music.

Q. 19. Is there anything in the perforated roll by which there is indicated to the eye the fact or characteristic of the music which in the staff notation is indicated by the division into measures or bars, or any means of ascertaining by eye the rythmic action or recurring accents of the piece?

A. There is nothing that corresponds with the measurement by means of bars of the printed staff.

Adjourned until April 13th, at 11 o'clock.

April 13th, 1893. Resumed pursuant to adjournment.

Witness Clark produces a graduated scale or ruler, according to his promise, and same is offered in evidence, marked "Defendant's Exhibit Clark's Graduated Scale."

F. W. PHILLIPS, a witness called on behalf of defendant, being sworn, testifies as follows in answer to direct interrogatories by Mr. Burton:

Q. 1. Please state your name, age, residence and occupation.

A. W. F. Phillips; thirty-two years; 1842 W. 22nd street, Chicago; employed in the manufacture of perforated rolls by Melville Clark Piano Company.

Q. 2. Please state what your particular department or
490 duty is in the manufacture of perforated rolls and how long you have been so employed.

A. In arranging, correcting and testing the rolls taken from the sheet music, and testing the pieces after they have been cut finally. I have been engaged in the business about three years.

Q. 3. Will you please describe, in outline, the method which you follow and steps taken in the work of arranging the cutting of perforated rolls?

A. The first thing is what we call the original—a piece of paper we draw across the board—with a graduated scale showing the intervals from side to side. This is cut out by hand and I try it on the Apollo by ear, finding the mistakes by ear that occur. The original is then returned to the persons laying out the same and is corrected by them. It is then returned to me for final trial. When it is correct it is stenciled onto a piece of heavier paper, and is punched out by a machine to make it perfectly exact. Then is put upon the large perforating machine and the finished piece produced, after which it is tried by myself again.

Q. 4. Will you please explain somewhat more particularly the process of laying out the original with the use of the graduated scale, stating, for example, what you work from and how you determine the positions and other characteristics of the various marks which you make and what those marks are intended to indicate?

A. We have a mark called "middle C," and the octaves on the scaale are numbered from 1 to 5. We first find any particular note on the music, and then find in which octave it is in the graduated scale, and then with a ruler, subject to certain conditions, we draw the length of the note on the paper that is run across the board.

Q. 5. On what is the mark called middle C?

A. It is on the third C from the lowest C on the Apollo.

491 Q. 6. You have answered as to the position that middle C occupies, I understand, in the Apollo player. My question was to the thing on which the mark is made which you referred to as the middle C mark.

A. It is on the paper which we call the original.

Q. 7. How do you locate the proper position of that mark so as to place it properly on that paper?

A. We have the corresponding mark for middle C on the graduated scale.

Q. 8. Do you extend that mark for middle C through the whole length of the paper as you work upon it?

A. No.

Q. 9. Please explain how far it extends on the paper or where it is placed with respect to the length of the paper as you work.

A. If it is a quarter note we have various lengths to make it for.

Q. 10. You mean that you mark middle C on the paper only when there is a middle C in the music?

A. Yes.

Q. 11. Then you do not locate the position of middle C on the paper as a place to measure from; you only locate it or make a mark for it as you would for any other note occurring in the score?

A. Yes, sir.

Q. 12. If you found in the score, for example, an A sharp in the second octave above middle C, state how you would determine the proper position of the perforation for that note on the roll. Describe how you would use the scale for that purpose.

A. Slide my ruler opposite the second A sharp above middle C on the graduated scale, and then draw a line corresponding to the length of perforation desired.

Q. 13. The line you draw is longitudinal with respect to the sheet?

A. Yes.

492 Q. 14. Then, as I understand, for each and every note occurring in the score you find a place for the perforation in the width of the sheet by means of the graduation marks on the scale. Is that correct?

A. Yes.

Q. 15. In the habitual performance of this process during the past three years in which you have been engaged in this work have you become so familiar with the location in the width of the sheet of each of the fifty-eight notes that by inspection of a perforated Apollo roll you can tell the note to which any given slot corresponds, as to its pitch, I mean?

A. Not without the graduated scale.

Q. 16. You cannot, by the eye, after your three years' experience at this work, tell whether a given slot corresponds to a particular note, or tell where to place a given slot to correspond to a particular note, by eye alone?

A. No, sir.

Q. 17. Will you please explain the causes or reasons, according to your experience, which make it impossible, notwithstanding the constant attention which the work requires to the position of slot corresponding to the several notes, to learn these positions so that the eye can place them without the assistance of the graduated scale?

A. In the first place, there are so many of the slots and the space between the center of each is so small that it would be impossible to tell them apart, and furthermore they are all covered up except the one note or the two notes which are to be read, and I am personally not able to tell anything beyond three slots apart; for instance, any row of books or boxes being all the same and not having any distinguishing marks upon them it would be impossible to pick out any one, say the twenty-fifth one, and if these same books were cov-

ered with a curtain and only one visible it would be impos-
493 sible to tell whether that book were the twenty-first or twenty-fifth or any number.

Q. 18. Are you familiar with the use of the Apollo player, using the perforated roll?

A. Yes.

Q. 19. Does the use of the player executing music on the piano by means of it give one a familiarity with the location in the width of the sheet or roll of the slots corresponding to the respective notes which would enable him to ascertain the pitch by observing the position of the slot by eye?

A. No, sir.

Q. 20. Now with respect to the duration of the notes; please state whether the lengths of the slots in the perforated roll are proportionate to the indicated duration of the notes on the score of music written in the ordinary or staff notation, *i. e.*, whether all the slots for quarter notes are substantially the same length, and all the slots for eighth notes are substantially the same length, and half that of the quarter notes, etc.

A. No.

Q. 21. Will you give some illustrations of the variations in the lengths of the slots and the disproportion between those lengths and the duration of the notes on the score?

A. I have the printed score of the song called "My Honeysuckle Girl" from the opera "When Johhny Comes Marching Home," and the perforated roll for the Apollo corresponding to same score. The first note, you will observe, is a ⅛ note. I have marked it No. 1, and I have marked the slot on the perforated roll coresponding to it also No. 1. And now I mark in measure 4 the first note of the air, No. 2, and the corresponding slot in the roll No. 2. Both 1 and 2 are
⅛ notes. No. 1 is ten millimeters in length; No. 2 is scant
494 four millimeters. I mark the next to the last 1/16th note in the air of second measure, No. 3, a 1/16th note, and also the corresponding slot in the perforated roll is marked 3. In measure 4 of the score the first ⅛th note of the air is a triplet ⅛, being of shorter value in the score than a ⅛, and the corersponding slot in the perforated roll which I mark No. 4 is the same length as No. 2, and ½ the length of No. 3 which is really shorter in the printed score than either No. 2 or No. 4. In measure 6 of the printed score I mark the fourth ⅛ No. 5 and also the corresponding slot in the perforated roll I mark No. 5. The last ⅛ in the air of measure No. 6 of the printed score I mark No. 6, and also the slot corresponding in the perforated roll I mark No. 6. The latter is 10 millimeters in length. No. 5 is 3½ millimeters. In reality these notes are the same length on the printed score. In measure 12 the first note in the air I mark No. 7, and also the perforation corresponding in the perforated roll No. 7. The top perforation of measure 13 in the accompaniment I mark No. 8, and also the corresponding slot in the perforated roll I mark No. 8. No. 7 is a ½ note in the printed score and is thirty-eight millimeters in length. No. 8 is four millimeters in length and is a ¼ note; in the printed score it is half the length

of No. 7 and in the perforated roll is hardly 1/10 the length of No. 7. In measure 14 I mark the highest note of the accompaniment of the last half No. 9, and the corresponding slot in the perforated roll No. 9. In measure 16 I mark the first note in the tenor part No. 10, and the corresponding slot in the perforated roll I mark No. 10. In the printed score No. 9 is a ¼ note and No. 10 an ⅛. No. 9 is four millimeters in length in the perforated roll and No. 10 is eleven millimeters in length, although in the printed score No. 10 is half the length of No. 9. In measure 17 I mark the first note in the bass No. 1, and the corresponding slot in the perforated
495 roll I mark No. 11. The lowest note in the accompaniment of the first quarter in measure 17 I mark No. 12, and the corresponding slot in the perforated roll I mark No. 12. No. 11 is nine millimeters in length. No. 12 is three millimeters in length. In the printed score these notes are equal. The last 1/16 in the lower octave of the air in measure No. 17 I mark No. 13, and the corresponding slot in the perforated roll I mark No. 13. The upper note of the accompaniment of the first quarter of No. 17 I mark No. 14, also the corresponding slot in the perforated roll I number 14. No. 14 is 3½ millimeters in length, an ⅛. No. 13 is nine millimeters in length, a 1/16 note. No. 13 on the printed score is half the length of No. 14.

The score "My Honeysuckle Girl" referred to by witness is also in evidence marked "Honeysuckle Girl Score," and the perforated roll referred to by witness is also in evidence marked "Honeysuckle Girl Roll."

Q. 22. Can you give any explanation or statement of some of the reasons why the lengths of the slots are so disproportionate to the different lengths of the notes to which they correspond?

A. In the first place, the lengths of the slots vary greatly on account of the mechanical exigencies of the machine—that is, the piano-player, and the arranger varies the lengths of the slots many times to give certain effects when the roll is played on the machine, so that I may say there is no note that has a certain length of slot corresponding to itself on the perforated roll.

Q. 23. On the perforated rolls as they are made for actual use, are there any marks indicating the division of the measures, such as you have placed on this roll you have been marking?

A. No.

496 Q. 24. Is there anything on the perforated rolls as manufactured for market indicating the rythmical structure of the music or the place of the accented or unaccented notes respectively?

A. No, sir.

Q. 25. Could you take a perforated roll, the original for which was arranged by some one else than yourself, and adapted to produce a piece of music which was not familiar to you and of which you had never seen the perforated roll before, and without the aid of the player or instrument by which music might be produced from such roll, *i. e.*, by mere inspection of the perforated roll, reproduce the staff notation?

A. No.

Q. 26. Could you, even if you had a graduated scale, such as might have been used in laying it out?

A. I wouldn't be sure of it.

Q. 27. Could you with certainty by that means reproduce the score in any other respect than as to pitch of the notes?

A. I don't know as that is any different from the other question.

Q. 28. Then your answer would be the same as to that question?

A. Yes.

Cross-examination by Mr. RAEGENER:

X Q. 29. Did you say you were in the employ of the Melville Clark Piano Company as an arranger and correcter of music?

A. No, sir. Correcter of the perforated rolls which we lay out from the printed score.

X Q. 30. Who lays out the rolls from the printed score?

A. We have young ladies for that purpose and also Mr. E. G. Clark and myself, when we have time.

497 X Q. 31. Who pays your salary?

A. Mr. E. G. Clark.

X Q. 32. Of the Melville Clark Piano Company?

A. I believe he has stock in the company; yes, sir.

X Q. 33. I was under the impression that the Q. R. S. Company, an independent corporation, made these perforated rolls, and not the Melville Clark Piano Company, but from your testimony I gather that it is the Melville Clark Piano Company that produces the rolls for the Apollo and pays your salary. Please explain this.

A. You are right, it is a separate corporation, but we sell most of our music to the Melville Clark Piano Company, and being in the same building, I was in error and said that I was paid by the Melville Clark Piano Company, although the Q. R. S. Company really pays my salary.

X Q. 34. Then you were mistaken in stating that you were an employee of the Melville Clark Piano Company?

A. Yes, sir.

X Q. 35. As a matter of fact, the relations of the Q. R. S. Company and the Melville Clark Piano Company are so closely interwoven that it is difficult to say whether you are an employee of the one or the other company, and as a matter of fact, the Q. R. S. Company, so far as you know, is simply one of the departments of the Melville Clark Piano Company. Is that correct?

A. No, sir; they have separate company, corporation, separate annual meeting, and separate stockholders to a great degree, as far as I know. I am not in the firm or either one of the companies.

X Q. 36. And you do not know, as a matter of fact, whether or not every share of the Q. R. S. Company is owned by the Melville Clark Piano Company?

A. I know that they are not. I know two parties who are stockholders in the Q. R. S. Company who are not in the Melville Clark Piano Company.

498 X Q. 37. But whether or not these two parties really own their stock or whether they are dummy stockholders for some one else, you don't know, do you?

A. Well, I wouldn't think so. I know them fairly well.

X Q. 38. I understand that before the perforated rolls are ready for the public you test them twice, once after corrections have been made and another time before they are manufactured in qualities?

A. They also test them after they have been manufactured.

X Q. 39. In order to determine the question whether the musical composition has been correctly translated from the printed score upon the perforated roll, you require the use of a piano, and you determine that question after you hear a reproduction of the composition?

A. Yes, sir.

X Q. 40. And it is only after your ear tells you that the piano has sounded the correct notes that you are satisfied that a correct reproduction of the score has been made?

A. Yes, sir.

X Q. 41. In answer to one of the questions put to you you have testified that even with the assistance of the graduated scale you would not be sure that you could correctly re-translate the perforations in the perforated roll into the corresponding notes of the original score of the musical composition. Please explain your answer more fully. In what respect you are not sure how successful you would be and how nearly you would reproduce and re-translate the perforations into corresponding notes on a printed score?

A. With the use of the piano and the player and the graduated scale I could, with my knowledge of the player, re-translate it back, and get it approximately right.

499 Further cross-examination by Mr. BROWNE:

X Q. 42. In your twenty-first answer you gave a number of illustrations by comparison of the "Exhibit Printed Score" of "My Honeysuckle Girl" and the corresponding "Exhibit Perforated Roll No. 2,779," of instances where the length of the slot is varied when that slot corresponds to the same note in the ordinary scale notation. You also say in your answer to the twenty-second question that one reason for doing this is "to give certain effects when the roll is played on the machine." I take it that the effects to be given are those indicated in the printed score. Am I right in this?

A. In one class, yes.

X Q. 43. Why should it ever be desired that the perforated roll should not give effects when played on the machine corresponding to the effects when the score is played as indicated therein?

A. We have to alter the length of the measure many times on account of the inability to obtain repetition of the notes if they are not so altered.

X. Q. 44. I think we must misunderstand each other. As I am informed, one of the great merits of these self-playing instruments operated by perforated rolls is that with the proper rolls properly operated they reproduce exactly the effect which would be obtained if the same composition were properly played upon a proper piano by a proper pianist from the printed score. As I read your last answer, however, this does not seem to be the case. I wish you would explain.

A. Being a machine, we have to arrive at those results spoken of in such a way as we can. The manner in which we do this does not admit of the same length of slot for the same length of note at all times.

X Q. 45. I find in the fifth complete measure of the score of "My Honeysuckle Girl" the air or melody in the upper octave in-
500 dicated by eight consecutive notes of equal duration, together filling one bar, the time of which is indicated as (2/2). Will you kindly mark the corresponding slots on the Exhibit Roll by making an "x" across them?

A. I have done so.

X Q. 46. I notice that each of these perforations which you have marked is apparently of the same length.

A. Yes, sir.

X Q. 47. Then in this particular instance there was no necessity to employ any departure from what I may term a standard length of perforation corresponding to the ⅛ note of this particular measure. Am I right?

A. Yes, sir.

X Q. 48. I notice that the Exhibit Roll has the tempo mark "allegretto" corresponding to the tempo mark of the score in substance. I also notice that whereas the first or opening measure of the piece down to and including the fourth, or what we may call the introduction, have the tempo mark 2/4, whereas the fifth and following measures are marked 2/2. I understand that these marks 2/4, 2/2, refer to the duration of time to be given in the performance of the measures which they control, the unit of duration of the measures being determined by the general direction "allegretto." For example, if the general tempo mark for this piece were "largo," I understand that the unit of duration of the measures would be longer; but that the subdivision of that unit, as indicated by the tempo marks 2/4 and 2/2, would be the same. Am I right thus far?

A. In the case in hand here it would really be a half note to a beat instead of a quarter, but the number of beats would be the same.

X Q. 49. The eight perforations which you cross-marked at my request appears to have each been made by a punch which
501 produced a perforation composed of two intersecting circles. Were these perforations in fact made by two blows of a circular punch, or by one blow of a punch having the form of the perforations?

A. We make two blows with a single round punch.

X Q. 50. At my request you cross-marked eight perforations corresponding to the ⅛ notes of measure 5. I will ask you to cross-mark in like manner the perforations to correspond to the five notes, four ⅛ notes and a ¼ note of measure 6.

A. I have done so.

X Q. 51. Will you kindly tell me how the perforation in this measure 6 corresponding to the F sharp in the score, ¼ note, corresponds in length with the four preceding perforations in the measure?

A. As 7 to 2.

X Q. 52. Was there any mechanical necessity for making the perforation corresponding to the F sharp ¼ note more than twice as long as the perforation corresponding to the four preceding ⅛ notes of this measure?

A. There is a reason. This F sharp in the perforated sheet corresponding to the F sharp in the score is shortened considerably from what an ordinary quarter would be, because it is the end of a phrase, and by shortening that and the rest of the chord you get the phrasing effect which a player would get with his or her hands.

X Q. 53. But if the arranger had chosen he might have made the perforation mathematically twice the length of the preceding ⅛ perforation; in other words, in this instance the governing consideration of the length of the perforation was æsthetic, and not due to any mechanical limitation to the self-playing instrument. Am I right?

A. We cut that off simply to get the effect of the finishing of a phrase.

502 X. Q. 54. The notation of the top line of measures 8, 9 and 10 is identical with that of the measures 4, 5 and 6 in the "Exhibit Score," is it not?

A. With the exception of the first two notes.

X Q. 55. In the sixteenth measure of the score I find the note B in the top line of the "Exhibit Score," a ¼ note over which there is placed a hold mark. Am I right in supposing that the effect of obeying the direction given by this hold mark will be to produce a holding of the note to a length or duration of time considerably longer than an unmarked quarter note should be held?

A. Yes.

X Q. 56. Please state approximately how the perforation corresponding to this held B quarter note corresponds in length to the preceding ⅛ note perforation of measure 16.

A. As 30 to 2.

X Q. 57. Here again arranger has determined the length to which this note should be held upon æsthetic considerations or considerations of effect mainly, has he not?

A. In his own judgment, he has endeavored to follow as nearly the intention of the composer in that hold, as possible.

X Q. 58. And the composer has indicated his intention by the use of the hold mark in the printed score?

A. Yes.

X Q. 59. In measure 32, in the top line, the composer in the printed score has written an E ⅛ tied to a following E ¼. I take that the effect of this is to prolong the E sound during the period covered by the two E's. Please state whether or not the arranger has not in like manner prolonged the perforation to produce the corresponding musical effect.

A. Yes.

503 X Q. 60. In the score which you have produced of "My Honeysuckle Girl" I find the following dy*mani*c marks: opening or incomplete measure, forte; fourth measure, piano; sixth measure, piano; seventeenth measure, pianissimo; twenty-fourth measure, mezzo forte; thirty-second measure, forte piano; thirty-sixth

measure, FF. Please state which of these dynamic marks you find reproduced on the "Exhibit Perforated Roll."

A. Forte on the incomplete opening measure; piano on measure 4; mezzo forte, measure 24; measure 36 FF.

X. Q. 61. The four dynamic marks in question are indicated by the "F loud," "P soft," "MF medium loud," printed on the sheet, and by the dotted line moving from the center of the sheet across to the right in measure 36, are they not?

A. Yes, sir.

Mr. F. W. Hedgeland, being recalled as witness on the part of the defendant, testifies as follows:

Direct examination by Mr. Burton:

Q. 1. In your testimony last week you referred to the fact that certain sort of musical instruments were in use before 1840. Can you state how early the automatic players controlled by perforated rolls or sheets appear by Patent Office records to have been developed as a part of the art of automatic instruments?

A. They are fully described in U. S. letters patent as valve sheets or controllers by E. P. Needham, May 29, 1877, Pat. No. 191,460; H. B. Horton, Oct. 30, 1877, No. 196,529; Merritt Gally, May 7, 1878, No. 203,257; by M. J. Matthews, May 28, 1878, No. 204,352; N. R. Marshman and M. J. Matthews, No. 209,492, Oct. 29, 1878;
O. H. Needham, Mar. 18, 1879, No. 213,442; R. W. Pain,
504 Aug. 5, 1879, No. 218,308. By these records it will be apparent that mechanical instruments using the perforated sheets as a controller were well known at that time.

Patents referred to by the witness are offered in evidence marked "Defendant's Exhibits" by their patent numbers, respectively.

Q. 2. Have you any means of knowing, and if so, you may state whether composers and publishers of musical compositions have found or judged it beneficial to them as owners of copyrights, or as affecting favorably the sales of printed copies, to have their compositions used as a basis for perforated rolls for playing the same by means of piano players or other automatic musical instruments?

Objected to by complainant's counsel as immaterial and not affecting the issue herein, which issue is that the owners of the particular copyrights in suit demand that infringements thereof shall cease by this defendant. It is utterly immaterial to any issue herein whether other owners of copyrights, ignorant of their rights, permit others to infringe the same, or whether for selfish reasons, or reasons peculiar to themselves, they have encouraged particular manufacturers of perforated rolls to reproduce the musical compositions owned by them in the form of perforated rolls.

Mr. Burton: Counsel's conception of the issue seems to have very significantly narrowed since the introduction of testimony of his own witnesses upon this point.

A. We have frequently received letters and copyrighted composi-

tions with the request that permission to us to cut them in perforated form without asking any compensation therefor other than the advertising same would create. These requests have come from composers and owners of copyrights.

505 Q. 3. Mr. Reginald De Koven, a composer of music, formerly of Chicago and now of Washington, D. C., being called as a witness by the complainant, in his testimony gave expression to what he considered grounds or reasons why the copyright law should be held to give to the copyright holder the right to control under his copyright the cutting of perforated rolls or sheets for this class of instruments to produce his compositions. Do you know of any facts constituting reasons affecting Mr. De Koven's disinterestedness or sincerity in the judgment he expressed?

A. I do.

Q. 4. Please state them.

A. Mr. De Koven was doubtless influenced by his publishers in this matter. It is a matter of common knowledge in the musical trade and profession that a contract exists contemplating the monopoly of the cutting of perforated rolls from copyrighted compositions. All the leading publishers—by this I mean the biggest ones—have signed an agreement with the Aeolian Company of New York City obligating themselves to give them exclusive privileges under their contract of any publication they may have, copyright or otherwise, for a consideration of 10 per cent. of the price of the perforated rolls sold; this contract not to be operative until a decision has been reached in a test case that is to be started by some third party, and a favorable decision obtained. I think this must have reached Mr. De Koven's notice. A full copy of this arrangement is published in the music trade papers and in the Musical Age of June 12, 1902. In addition to that I have seen and handled, signed and witnessed documents of this kind, together with the letters from the principals thereto; and have, with my own hands, taken prints using the original documents as positive — of the complete contract corre-

506 spondence from the Aeolian Company to the publisher, stating that a sufficient number of signatures to this agreement had been obtained to give them control of this product—perforated rolls. These papers have the original signatures and the acknowledgment and signatures of witnesses thereto.

Objected to by complainant's counsel as hearsay and guesswork, and furthermore as incompetent and not the best evidence. Notice of motion is hereby given to strike out this answer.

Cross-examination by Mr. RAEGENER:

X Q. 5. Inasmuch as you appear to make more than the ordinary interest in this litigation—certainly more than the ordinary witness—and as you have told us, or rather guessed why Mr. De Koven gave testimony herein, favorable to complainant, just define your position in this case.

A. My position is identical with the composers'; with no restriction or monopoly existing, I should enjoy what I now enjoy—a royalty

on players we manufacture and a royalty on the patent paper perforating machines on which we produce the perforated rolls, which royalty is based on the output in perforated rolls. Should a monopoly be created on this, as contemplated, I would be deprived of this revenue, and would have but one corporation to which to submit my devices. The same would be true of the composer who wished a composition perforated.

X Q. 6. Question repeated. I want to know, are you assisting in the defense of this case, or is your company The Kimball Company—paying the whole or a part of the defense of this case?

A. I am interested in this case for reasons previously stated in the preceding answer. Was not asked to testify in this case;
597 made the request myself to my company, that they were as much interested in it as I was, and I was anxious to appear as a witness as I had personal rights that needed my defense. I am not aware what, if any arrangement my company has with the defendant in this litigation.

X Q. 7. Did you say just now "I ought to get something out of my patent"? What do you mean by that?

A. I, like others in this art, own patents on players and player mechanism, also means for producing perforated rolls and receive monthly royalties therefrom, with others. Should the copyright law be construed to cover perforated music rolls, a monopoly would be immediately created by reason of the contract or arrangement which I have seen and read between a competitor and the music publishers as a whole. My revenue from both perforated rolls and my United States patents on the devices would be immediately cut off with the existence of this arrangement.

X Q. 8. And because there is danger that your revenue in connection with your patented machines may be injured if your privilege to pirate musical compositions in the manner you and your company have done for several years past, you believe that a great wrong would be done to you. Have you never considered the wrong done to the composer and owner of the copyright whose music you have pirated without permission?

A. I object to the word "pirate." As stated in previous testimony, perforated music rolls or sheets have been in existence for thirty-five or forty years. There have been patented improvements made in them and on them during this period. They have been regarded by the Patent Office as a controller and part of a mechanical machine; they have been an essential combination to every claim patented on these machines; have never been regarded by any one technically conversant with their use as "music," and as here-
508 tofore previously stated have always been regarded as an inexpensive and efficient way to advertise and popularize new compositions. With such an arrangement which I have previously spoken of as a combination to pool all publishing interests, as far as perforated rolls go, the composer would loose his unrestricted market for having his publications cut and would suffer with me in this regard.

X Q. 9. I agree with you that your company has in an "inex-

pensive way" procured copyrighted musical compositions and made perforated rolls therefrom upon your patented machine and paid you a royalty and probably a greater royalty because the compositions used were pirated; but it is a fact, is it not that for thirty-five years or more there have been authors and composers of musical compositions and that you, owning or controlling these patented machines, have never offered to pay these authors, composers and owners of copyrights, even one per cent. of a royalty for the production of their compositions in the shape of rolls.

A. We have never knowingly pirated any one's property. As previously stated, these music rolls, as you term them, have been used for a number of years. There was a monopoly created on them for a number of years by virtue of letters patent covering them as controllers for pneumatic musical instruments. This concern, until recently enjoyed a monopoly of this business, and as I testified above, they now seek a decision by the copyright law to create a second monopoly for them. Since these patents lapsed and became public property there has been a general advance stimulated amongst manufacturers in the way of manufacturing automatic musical instruments using these perforated rolls. Our firm has manufactured them more or less the last five years, during which time we
509 have never received one request for compensation for anything we have ever placed on a perforated roll. On the other hand, we have received numerous requests asking us to produce these musical results for our instruments, and offering to take enough rolls to cover the heavy expense of producing the first matrix.

X Q. 10. Has your company ever paid or offered to pay a royalty or compensation to any author or composer for the right to produce his composition in the form of perforated rolls?

A. As stated above, we have never been asked to make such compensation. The method has been in vogue without compensation for thirty-five or forty years. I mean the adapting of musical vibrations or reproduction of musical vibrations through the agency of a perforated roll. Never having had a request for any compensation, knowing that others at all times have had the use of any and all reproductions in this way, it would not be expected and would be considered very unbusinesslike to hunt up some one to take royalties on something that had never enjoyed that distinction.

X Q. 11. Would the existence of this alleged monopoly referred to by you prevent your company from dealing directly with composers and authors and offering to compensate these authors and composers for the privilege of publishing their compositions in the form of perforated rolls?

A. It would prohibit our cutting anything but what was cut prior to the rendering of a favorable decision in this matter; it would give to the principals in this compact, on the one ha-d the right to reproduce their publications and copyrights exclusively in perforated roll form; on the other hand would exterminate a market that the composer now has for his compositions, and place him without redress in the hands of the monopolists' rings that would be created
510 should a decision be so made. I am making these statements, not from hearsay of such an arrangement, but from positive

knowledge of it. The composer now can go to one of any number of roll perforating concerns; he can sell a copyrighted composition in the open market to any one of them, and oftentimes receive a greater compensation for his composition to be reproduced in mechanical roll form than he could by submitting it or selling it to a publisher of sheet music. This industry has stimulated and created a wider field for the work of the composer than has ever existed before for these reasons.

X Q. 12. Then, if I understand you correctly, if the court should hold the perforated roll to be an infringement of a musical composition, the author or composer can hereafter go to publishers of perforated rolls and in all likelihood obtain from such publishers of perforated rolls a very much larger compensation than he would receive from publishers of sheet music.

A. You have misunderstood me. Should the court decide that a perforated roll is an infringement of a copyrighted musical composition, the composer would only have one firm or corporation with which to deal if he desired this composition reproduced in perforated roll form; whereas now there are numbers of different concerns manufacturing perforated rolls; his market in this respect would be limited and controlled not only to reproductions in roll form, but the value of his product as a whole for other purposes, as the combination referred to is not between the composer and a peforated roll manufacturer, but is between a publisher and a manufacturer of perforated rolls. Many of these publishers have existing contracts with composers to take all their publications or compositions which have to be submitted to them first; for instance, a case: should
511 a publisher refuse to take a composition of the composer's, under existing conditions the composer can popularize it by having it cut in roll form. With a favorable decision on this question, a composer would be deprived of this valuable means of making his composition known—not in musical notation form, but orally, by which means all such compositions are judged.

X Q. 13. But although the market to sell copyrighted musical compositions to manufacturers of perforated rolls has existed for many years, you and other perforated roll manufacturers, to the best of your knowledge, information and belief, have never paid a cent to authors, composers or owners of copyrights; and now, as there seems some likelihood of your being forced to pay, you, with your patented machine, begin to squirm.

A. This is a mistaken impression on your part. Without admitting that anything that goes into a perforated roll is a composition, I wish to state that we have at many times paid for the material which formed the base and results of many of our rolls.

Adjourned until 11 o'clock, April 14th.

April 14th.—Resumed, pursuant to adjournment.

Redirect examination of Mr. PHILLIPS by Mr. BURTON:

R. D. Q. 62. Referring to your answer to question 21, please state what is the indicated length on the score of the notes, which are numbered "11" and "12" respectively.

A. ⅛ notes.

R. D. Q. 63. Will you please prepare and put in as a part of your testimony a schedule of the notes referred to in your answer to question 21, giving the numbers which you have assigned to them, from 1 to 14 in a column, and the slot lengths respectively opposite
512 the numbers in column having headings indicating the valuation of the notes respectively on the score.

A. I have made such schedule and here it is.

The schedule produced by the witness is offered in evidence marked "Defendant's Exhibit Phillips Schedule on 21st answer.

R. D. Q. 64. In your answer to X Q. 43 you stated:

"We have to alter the length of the measure many times on account of the inability to obtain repetition of the notes if they are not so altered."

Will you please explain what you meant by this answer, and state what occasions the necessity for different lengths on the perforated roll for measures.

A. After scanning a whole piece through, observing the character of the tempo, for instance, presto, largo, etc., and also observing the repetition of notes we are then enabled to decide on the length of measure to be used in the whole piece, and sometimes the character of the piece necessitates the changing of the length of measure in the course of the piece itself.

R. D. Q. 65. Whatever length you adopt for the measure of the piece or a part of it is a fact known only to the person who is laying out or arranging the original for cutting the roll, and is not marked or indicated in any way on the roll itself, as manufactured for sale, as I understand. Is that correct?

A. Yes, sir.

R. D. Q. 66. Please refer to X Q. 48 and your answer and explain somewhat more fully what is the effect of the change of time from 2/4 to 2/2 or as the case may be upon the time value of notes of the same style of indication, as for example those indicated as ¼ notes, in both instances, and state whether or not the duration of the measure is changed by the change of style of time, and if not, what is changed?

513 DEFENDANT'S EXHIBIT PHILLIPS' SCHEDULE ON 21ST ANSWER.

Slot Lengths.

No.	½ notes.	¼ notes.	⅛ notes.	Trip. 8ths.	1/16 notes.
1	.....	.....	10m	.....	.....
2	.....	.....	4m	.....	.....
3	.....	.....	.....	.....	8m
4	.....	.....	.....	4m	.....
5	.....	.....	3½m	.....	.....
6	.....	.....	10m	.....	.....
7	38m	.....	.....	.....	.....
8	.....	4m	.....	.....	.....
9	.....	4m	.....	.....	.....
10	.....	.....	11m	.....	.....
11	.....	.....	9m	.....	.....
12	.....	.....	3m	.....	.....
13	.....	.....	.....	.....	9m
14	.....	.....	3½m	.....	.....

514 A. In the case of an indicated change of time in the printed sheet of music, when the time is not modified by any printed indication, as allegretto or andante, the length of the measure remains the same, but the value of the notes indicated is changed; for example, in the 2/2 time and 2/4 time, a quarter note in the 2/2 time would be of equal value of an eighth note in the 2/4 time.

R. D. Q. 67. Then the slot which will have to be cut for the quarter note at a part of the piece where 2/2 time was indicated might be, unless affected by other characteristics of the music, of the same length as the slot cut for the eighth note where 2/4 time is indicated?

A. Yes.

R. D. Q. 68. And any one attempting to ascertain what the score was by comparison of the slots, having no indication on the perforated roll, either of the measure divisions or of the character of time, would be wholly at fault or misled by this similarity of length. Would he or would he not?

A. He would.

R. D. Q. 69. In one of your answers you spoke of the exigencies of the mechanism compelling certain variations in the cutting. Does the character of the mechanism and its limitations ever necessitate changing the composition in details, because, as composed, it cannot be correctly reproduced by the perforated roll on the player?

A. Yes.

R. D. Q. 70. Please give us an illustration of this sort of case.

A. In many cases where there are repeated 1/32 notes, and it is not advisable to prolong the measure so long as would be necessary to obtain the repeated thirty-second notes properly, which requires

an aperture for each note and a space between the apertures,
515 we take the first 1/32 and the third 1/32 as they are written,
but the second and fourth thirty-second we put an octave higher, and thus obtain an effect somewhat similar to that designed by the composer.

R. D. Q. 71. Referring to X Q.'s 51 and 52 and your answers, I understand that Mr. Brown intended to point out that the perforation corresponding to the F sharp ¼ note mentioned was disproportionately long with relation to the perforation corresponding to each of the 4 preceding ⅛ notes of the measure, but from your answer to X Q. 52 I would understand that you regarded the perforation for the F sharp ¼ note as being shorter than normal rather than longer. If that is the fact can you tell about how much longer that perforation for F sharp would have been if it had not been shortened to mark the closing of the phrase.

A. It would have been nearly or quite twice as long.

R. D. Q. 72. Then, but for the reason you stated for shortening it, the length of that ¼ note slot would have been seven times instead of three and one-half times as long as each of the ⅛ note slots. Would it?

A. Yes, it would.

R. D. Q. 73. Can you explain why this extreme disproportion between notes in the same measure whose indicated lengths are only as two to one on the score should be the necessary or proper means of producing musical effect designed by the score, if that is the case?

A. In that case the ⅛ note indicated is formed by a very short slot so as to render the note staccato, and the quarter note would have about its proper proportion of the measure length.

R. D. Q. 74. Referring to the score and understanding that X Q.'s 51 and 52 and your answers referred to the notes in the air and not the notes in the accompaniment in measure 6, I
516 notice that these ⅛ notes in the air are not marked staccato in the score. Is this an instance in which the proper musical effect, in view of the exigencies of the machine, required those ⅛ note slots to be cut as for staccato, notwithstanding they are not so written?

A. We cut them in that form because the composition is a light crisp one, and to obtain the effect on our machine we used that form.

R. D. Q. 75. Now, I understand from your explanations as a whole that with the score before you and also the perforated roll which has been cut from it and this means for laying off the measure divisions on the perforated roll, and thereby dissecting it, so to speak, until you are able to pick out the perforations which the cutter made for the purpose of reproducing the several notes in each measure of the score, you can discover from your familiarity with the process of cutting, that a given slot for a certain ⅛ note, for example, is made longer than another slot for a certain ¼ note, or that a slot for a ¼ note is made seven or eight times instead of only twice as long as another slot for an eighth note, for certain reasons in each case, some of which you have explained; but in the absence

of the score, and without the divisions into measures marked on the perforated roll, could you tell whether a certain long slot compared with a certain shorter slot represented a correspondingly longer note, or represented a note slurred with another, or whether the shorter slot was shorter because of being staccato, or for the purpose of producing a crisp effect; or on the other hand, was shorter because it corresponded to a note of shorter indicated length on the score?

A. No, I could not tell.

R. D. Q. 76. If it should happen that the compass of the musical composition exceeds the compass of the player, having notes
517 either higher or lower than the player can strike, what do you do in cutting your rolls, to present the music?

A. Either bring the passage down or up as the case may be, or else re-arrange the passage in such a way that the transmission from one octave will not seem so abrupt according to our own taste.

R. D. Q. 77. In handling a perforated roll in any attempt which you might make to ascertain the score of the music which it was intended to produce, if it had been cut to cover such a difficulty as referred to in the last question and answer, would there be any means by which you could discover that and restore the score correctly?

A. Certainly, I could by playing the piece on the player and watching the music, printed score, and marking the notes which played differently from the notes in the printed score and then putting the perforated roll on a board and writing in the correct notes in the score and stop up the interpolated notes with paper for that purpose.

R. D. Q. 78. There would be no way that you could learn from a perforated roll cut in the manner described what the changes from the original score were, except by reference to the original score itself while listening to the piece produced by means of the perforated roll on the player, I infer?

A. No, there would not.

Recross-examination by Mr. BROWN:

R. X Q. 79. In your 76th answer you described how you reproduced certain passages in the printed score by bringing it down or up an octave or otherwise "re-arranging." Have you ever heard this spoken of as "faking"?

A. No, sir, except by yourself.

R. X Q. 80. In your direct examination Q.'s 3 to 8 and
518 12, you describe the method which is followed and the steps taken in the work of arranging the cutting of perforated rolls as practiced by the Q. R. S. Company of Chicago, Ill., by whom you are employed. I will ask you whether the process or method and steps you speak of correspond to the exhibits "First Step," "Second Step," "Third Step," and "Fourth Step" now shown?

A. They do.

R. X Q. 81. I will ask you to examine "Complainant's Exhibit Roll" bearing a brown paper label on which is printed "3192 Ken-

tucky Babe Schottische, Geibel, Q. R. S. Company, Chicago, Illinois, U. S. A.;" also "Complainant's Exhibit Roll" having a label containing "4559 Little Cotton Dolly (Plantation Lullaby) Key of C., A. Geibel, Q. R. S. Company, Chicago, Illinois, U. S. A." I will ask you whether the originals of these rolls were produced by following the steps "Exhibit First Step" to "Fourth Step" inclusive?

A. As far as my knowledge goes, they were; I was not employed in my position with the Q. R. S. Company when the "Kentucky Babe" was produced, and this "Little Cotton Dolly" I did not correct. Mr. Clark corrected that himself.

R. X Q. 82. But if I understand you, the process employed by the Q. R. S. Company at the time when the roll No. 4,559 "Little Cotton Dolly," was produced, was the process shown by "Exhibit First Step, to Fourth Step" so far as the original of that roll is concerned?

A. Yes, sir.

519 CLAYTON F. SUMMY, witness called on the part of the defendant, being sworn, deposes and testifies as follows:

Direct examination by Mr. BURTON:

Q 1. Please state your name, age, residence and occupation.

—. Clayton F. Summy; 220 Wabash avenue; age, —; music business; vice-president and treasurer of Clayton F. Summy Company.

Q. 2. Please state whether your company has entered into a contract with the Aeolian Company.

Objected to as irrelevant and immaterial.

A. Yes. It has, and I produce the contracts, together with a letter from the Aeolian Company.

Same objection.

The papers produced by the witness are offered in evidence and marked "Defendant's Exhibit Aeolian Summy contracts, documents, 1, 2 and 3."

Objected to by complainant's counsel as immaterial, irrelevant and incompetent.

Q. 3. Is that the signature of your company, and did you put it upon these documents, 1, 2 and 3?

Same objection by complainant's counsel.

A. Yes.

Same objection.

By consent, in place of the three documents just offered in evidence photolithographic copies of the same are substituted, the names of Clayton F. Summy Company and the dates being omitted from said photolithographic copies. Complainant's counsel, however, insists on his objection as to the materiality, competency and relevancy of the original documents.

No cross-examination.

CHARTS

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LARGE

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523 Complainant's counsel gives notice that at the proper time he will make a motion to strike the deposition of this witness from the record, on the grounds stated, for the reasons that the said testimony is incompetent, irrelevant and immaterial.

Complainant's counsel admits that if the foregoing deposition is allowed to stand and is not stricken from the record by the court, similar agreements were made between the Aeolian Company and the White-Smith Music Company, the complainant herein, prior to the commencement of this suit.

Mr. FREDERICK W. HEDGELAND testifies as follows:

Redirect examination by Mr. EVARTS:

R. D. Q. 14. Please refer to your answer to X Q. 9 and state what concern you refer to in that answer.

A. I refer to the Aeolian Company of New York City.

R. D. Q. 15. Please explain what you mean by the phrase, "material which forms the base and results of many of our rolls" in your answer to X Q. 13.

A. I mean the material which forms the base of the location of the perforations, not the paper that is employed in the manufacture of it, and not admitting that anything that enters into the perforated roll is a composition, I took this means of expressing what I meant. I mean by this that whether it be a re-arrangement or design for perforated roll, or whether it be taken from the fingers of a player, I term this the base on which the perforations are made.

R. D. Q. 16. Please state what position the Chicago Musical College and Musical Department of the Northwestern University occupy as compared with other musical colleges in Chicago and vicinity.

524 A. They rank as the largest in the west and are reputed to have in these two colleges the largest attendance and greatest number of tutors of any, and they stand amongst the highest in musical colleges.

No cross-examination.

Signature waived.

Mr. CHARLES H. WAGNER, a witness called on behalf of the defendant, being duly sworn, deposes and testifies as follows:

Direct examination by Mr. BURTON:

Q. 1. Please state your name, age, residence and occupation.

A. Charles H. Wagner; age, 40; employed by Melville Clark Piano Company as vice-president.

Q. 2. In your relations to the business of the Melville Clark Piano Company, have you had any opportunity to ascertain the attitude of music publishers and composers having copyrighted music, toward the business of making and selling perforated rolls for playing such music, with respect to their desire or otherwise to have their compositions cut in the perforated rolls? If so, please state the facts and the means by which you have learned the same.

A. Well, there are quite a number of piano houses which are publishing music and a few which are not selling players, but only publishing music, which have requested me to take their compositions and reproduce them, or put them in such condition that they can be played on mechanical instruments. In fact, a prominent publisher in New York wrote to me, care of Reynolds House in Boston, asking me to cut all the pieces as soon as he gets them from the composers.

Q. 3. Have these publishers or composers making such request to have their compositions cut in perforated rolls, asked or
525 received compensation in the way of royalty; or what has been their attitude as to that point?

A. No, sir; in fact, they consider it quite an advertisement for them; and in fact, two or three of them have offered to buy a certain number of rolls if we will cut their music, and pay us the money for them.

Objected to as hearsay.

Q. 4. To whom or in what form were these offers made to give compensation for purchasing rolls for having the same cut?

A. In the shape of a letter.

Same objection, as not the best evidence.

Q. 5. Will you, from recollection, state the names of some of these publishers or composers, as you may recall them, who have requested to have their music cut in perforated rolls, and made inducements to that end?

Same objection.

A. Benjamin Curtaz & Sons, San Francisco, Calif., Von Tilzen, New York, N. Y., E. Witzman & Company, Memphis, Tenn., Flanner, Milwaukee, Wis., Grunewald, New Orleans, La.

We have cut music for all these at their request; in fact, one of them is writing a special piece for us to be used on our automatic machines first, and afterwards published, as he thinks this a better advertisement. His name is Harry Curtaz. There are quite a number of others.

Q. 6. Will you produce the letters from these parties from the files, so far as you can find them, to be offered in evidence here, if desired?

A. Certainly.

Defendant's counsel offers in evidence the letters referred to by the witness, to be marked respectively, "Defendant's Exhibits Requests for Cutting Music," numbered from 1 to —.

526 The exhibits above referred to are objected to as secondary evidence and not the best, and furthermore as incompetent and irrelevant.

Cross-examination by Mr. RAEGENER:

X Q. 7. You are one of the directors and vice-president of the Melville Clark Piano Company?

A. Yes.

X Q. 8. In what relation does the Q. R. S. Company, that manufactures these perforated rolls, stand to your company?

A. The Q. R. S. Company is an absolutely independent concern, and no relation to us.

X Q. 9. Who owns the stock?

A. I do not know. I know I do not. I wish I did.

X Q. 10. Do you know whether the Clark Company owns the stock of that company?

A. They do not.

X Q. 11. Does Mr. Melville Clark substantially own the stock of the Q. R. S. Company?

A. I do not know Mr. Melville Clark's private business, but I don't think he does.

X Q. 12. The Q. R. S. Company has its offices in the same building with the Melville Clark Company?

A. I don't think they have. I don't know for certain. They manufacture their music rolls and rent space from us; but where their office is I do not know.

X Q. 13. Have you any dealings with that company?

A. No, sir; not I.

X Q. 14. However, your company gets the entire output of the Q. R. S. Company?

A. I don't think so; I know we do not get the whole output; but shipments are being made to somebody else.

X Q. 15. And you do not know that somebody else?

527 A. No, I do not know now. I know shipments have been made, but I do not know to whom.

Signature waived.

HENRY B. MACCOY, a witness called on behalf of the defendant, being sworn, deposes and testifies as follows:

Direct examination by Mr. BURTON:

Q. 1. Please state your name, age, residence and occupation.

A. Henry B. MacCoy; 38; residence, Chicago, Illinois; occupation, music dealer.

Q. 2. How long have you been engaged in your present business?

A. Twenty-three years.

Q. 3. By music dealer you mean dealer in sheet music and other musical publications?

A. Yes, sir.

Q. 4. Not musical instruments?

A. No, sir.

Q. 5. Are you familiar with the machines commonly called "piano-players" which are operated automatically by perforated rolls, and other automatic musical instruments similarly operated?

A. Not technically. I know what they are.

Q. 6. In your experience as a music dealer, have you had any opportunity to observe what, if any, effect upon the demand for music published in the ordinary form (in sheet music or other

printed form) is produced by the introduction and increasing use of the automatic players referred to? If so, will you state what your experience and observation indicates in this respect?

528 A. My observation has been that we have had more or less demand for things that have been heard in that way; that is, through the medium of these mechanical players.

Q. 8. Do you have calls for sheet music of the compositions which have been cut in perforated rolls for the automatic players, by parties who indicate that they are led to purchase sheet music on account of having heard the music played on the automatic machines?

A. That is the impression that I have got from calls that I have had.

Q. 9. Please state what has given you that impression; I mean, whether what they said or did gave you that impression.

A. I have frequently had people come in and say "I want such and such a thing. I heard it on the —, and will mention the name of some particular player.

Q. 10. From your experience during the recent years during which these automatic players have been growing in prominence and popularity and extended use, is there anything to indicate that their use diminishes the demand for the musical compositions in sheet form which have not been cut for the players?

A. I have seen nothing to indicate that.

No cross-examination.

Signature waived.

JULIUS W. PETERS, a witness called on behalf of the defendant company, being sworn, deposes and testifies as follows:

Direct examination by MR. BURTON:

Q. 1. Please state your name, age, residence and occupation.

A. Julius W. Peters; age, 45; residence 4465 Oakenwald avenue, Chicago, Illinois; bookkeeper for Chicago Musical College.

529 Q. 2. In your capacity of such bookkeeper, have you been entrusted with the keeping of the attendance of that institution?

A. I have.

Q. 3. Will you please state what those records show as to the rate of growth of the attendance of pupils at that institution during recent years, giving, if you can do so, the rate from year to year, down to the current year.

A. I have taken this report from the year 1896-1897, and our years run from September to September. The increase from 1896-1897 to 1897-1898 over the preceding year was 9.6 per cent.; in the following year, 10 per cent.; in the next year, 10 per cent.; in the next, 23¾ per cent.; and in the next year, 12.9 per cent.

Q. 4. Can you give, from the indications so far in this year, the approximate rate of increase?

A. I should say it would be at least as much as last year, which was approximately 13 per cent.

Q. 5. What is the total increase in attendance from the first year of which you have stated the figures, to the present time?
A. 75.3 per cent., that is, up to September, 1902.

No cross-examination.
Signature waived.

Mr. WILLIAM MCKINLEY, a witness called on behalf of defendant, being duly sworn, deposes and testifies as follows:

Direct examination by Mr. BURTON:

Q. 1. Please state your name, age, residence and occupation?
A. William McKinley; 41; No. 3306 Indiana avenue; Chicago, Ill.; music publisher.

530 Q. 2. How long have you been engaged in the music publishing business?
A. Seven years.
Q. 3. Have you been in Chicago during that entire time?
A. Yes, sir; I have been as a publisher seven years, and interested as a salesman about ten years.
Q. 4. Are you familiar with the automatic instruments commonly called "piano players" and other automatically operated musical instruments which are controlled by perforated rolls or sheets?
A. Yes, sir.
Q. 5. From your experience and observation in the music publishing business, have you any opportunity to judge what, if any, effect the increasing introduction and use of these automatic players and instruments has upon the demand for and sales of sheet music or other music printed in the customary form?
A. I think that the sale of what is known as "sheet music" has increased. I know it has increased, from personal experience.
Q. 5*a*. Will you give any specific facts within your knowledge derived from your experience in your business on which you base this conclusion?
A. I was advised to purchase a roll entitled "O Dites Lui," and had played it at my own home; and I know of a number of copies of the music that were purchased from the fact that I had played that piece and called it to the attention of my friends.
Q. 6. During the period, say for the past three years, during which the manufacture and sale of these automatic players has been most rapidly increasing, what has been the fact with regard to the sales of sheet music, as to growth or diminution?
A. My business has greatly increased.

531 Q. 7. If you have made any examination with regard to the compositions which have been cut in perforated rolls and used in automatic players by the different companies making such players, as to the sales which have been made of these pieces in sheet music form during the period, say of the last three or four years, or since the time when they were cut in perforated rolls, will you state how the sales of such pieces have run? Have they increased or decreased during those years?

A. My business has very greatly increased in certain pieces that I know are issued in the form of a perforated roll.

Q. 8. Have you in mind—if so, you may state as near as you recall—the rate of increase of any number of those which you may have looked up and remember, giving their titles, if you recall them; and, if not, in general.

A. The sales of some of the pieces have doubled within the last two years—double what they were for the four years previous. I have traced up about 20 pieces of that sort to get these figures from which I stated the comparison above. I know when I desire to get new music for my family I call on the operator or performer of some of the stores that handle the music rolls. They often give me a list of the pieces. I usually purchase that. I have a list in my pocket of perhaps at least twenty pieces that I have been recommended to purchase. They have been recommended to me by one of the young men who has charge of that department—music rolls—in one of the stores; pieces I had never heard of before.

Q. 9. I understand you mean by your last statement that the pieces that you are recommended to purchase are so recommended by persons who have opportunity to hear them played by means of the perforated rolls?

A. Yes, sir.

532 Q. 10. So that, to the extent of your purchases, and any other's purchases in the same way, the perforated roll is really the means of selling the music?

A. I think so.

No cross-examination.

Signature waived.

WALTER LUTZ, witness called on behalf of defendant, being duly sworn, deposes and testifies as follows:

Direct examination by Mr. BURTON:

Q. 1. Please state your name, age, residence and occupation.

A. Walter Lutz; 29 years; 902 North Halsted street; salesman with H. B. MacCoy in the music business; Chicago.

Q. 2. How long have you been engaged as music salesman?

A. Sixteen years.

Q. 3. Are you familiar with the machines commonly called "piano-players," and other automatic musical instruments such as the Aeolian and the Orpheus, which are controlled by perforated rolls?

A. I am, in the way of hearing them, but that is all. I know what they are.

Q. 4. From your experience as a salesman of sheet music, have you had any opportunity or occasion to judge what effect, if any, the introduction and increasing use of the piano-players and other automatic instruments of this class has upon the demand for and sale of the sheet music of the same compositions?

A. Yes, I have had people come in the store and ask for music which they had heard from the various players.

Q. 5. Is it a common occurrence, in your experience, that people

come to buy sheet music and explain their calling for the
533 particular pieces by stating that they have heard them played on these automatic musical instruments?

A. No, it is not a common occurrence, but it has occurred a number of times. I would not call it a common occurrence.

Q. 6. Will you state any specific instances that you recall of this character?

A. There are only two instances that I know, or remember by the titles of the music that they called for—one is called "Come, Dance with Me," and another is a mazurka by Krause.

Q. 9. For how long a time back have you noticed an increase in calls for music being coupled with explanations of this sort by the purchasers? I mean explanations of the reason for their asking for the music, that they heard it from the self-players.

A. I didn't know what it was, and I would ask them where they heard it, and where they got their information.

Q. 10. You mean that the way they happened to give this information——

A. (Witness interrupting:) I did not know what the piece was; I inquired where they heard it, and they stated that they had heard it on the piano-player.

Q. 11. Referring to my former question—up to how long back have you been accustomed to such inquiries and explanations?

A. The first inquiry I had was about a year and a half ago.

Q. 12. Since then, how often have they happened?

A. Oh, every once in a while it would occur.

No cross-examination.
Signature waived.
Adjourned subject to notice.

534 STATE OF ILLINOIS, *County of Cook, ss:*

I hereby certify that the foregoing typewritten manuscript of one hundred and twenty-four pages contains the depositions of Frederick W. Hedgeland, Ernest G. Clark, Geo. Schleiffarth, Peter C. Lutkin, F. W. Phillips, Clayton F. Summy, Charles H. Wagener, Henry B. MacCoy, Julius W. Peters, Wm. McKinley, and Walter Lutz, taken before me on the eighth, ninth, tenth, eleventh, thirteenth and fourteenth days of April, 1903, on the part of the defendant, and the whole thereof; that said witnesses were duly sworn and testified as stated in said manuscript; that the exhibits therein referred to were duly produced before and certified to by me; that said depositions and exhibits are, by consent of counsel, retained in the custody of counsel for defendant, to be produced and filed at or before the hearing of this case.

EDWARD T. WRAY,
[SEAL.] *Notary Public, Cook County, Illinois.*

Dated at Chicago, Illinois, April 14, 1903.

535 United States Circuit Court, Southern District of New York.
In Equity.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

Testimony taken on behalf of defendant, pursuant to notice, under and pursuant to the Sixty-seventh Rule of the Supreme Court, as amended, before John H. Shields, Esq., a Standing Examiner of this court, at the office of Wilcox & Brodek, No. 220 Broadway, Borough of Manhattan, New York City, New York, on Wednesday, May 13, 1903, at 1.30 p. m.

Appearances: Louis C. Raegener, Esq., of counsel for complainant; Charles S. Burton, of counsel for defendant.

GERRIT SMITH, a witness called on behalf of the defendant, being first duly sworn, deposes and testifies as follows, in answer to interrogatories proposed by Mr. Burton:

Q. 1. Please state your name, age, residence and occupation.

A. Gerrit Smith; age, 43; residence, New York City; occupation, composer, professor, musician.

Q. 2. How long have you been engaged in musical occupations?

A. About twenty years.

Q. 3. Will you kindly mention some of your compositions that are best known?

A. I have published about seventy-five songs, church music, and several piano cycles and song albums.

Q. 4. Will you mention any positions which you have held as instructor on musical topics in any capacity?

536 A. I have been for thirteen years professor of music at the Union Theological Seminary, still occupying that position; I have been the organist of South Church, New York, for seventeen years past; I was the president of the Manuscript Society of Composers in this country for six years; I have been the president of the American Guild of Organists for three years; I have been the president of the New York State Teachers' Association, and other societies.

Q. 5. Will you please give us a definition of a musical composition?

A. Do you mean a written musical composition?

Q. 6. I did not intend my question to be limited to, or in fact, to relate to the form of presentation, but meant to inquire for a definition of a musical composition or musical compositions, apart from the question of form of presentation.

A. I should define musical composition as the art of combining musical sounds according to a certain arrangement of pitch, duration and notation, the composer's idea depending naturally upon the amount of his own abilty and inspiration.

Q. 7. In defining musical composition as an art, you distinguish, I understand, the process from the product. Will you now give us a definition of *a* musical composition, meaning a product of the art of music composition?

A. A musical composition consists of a series of musical ideas expressed in terms of pitch, duration and notation, as I have before stated, and so arranged as to be capable of interpretation by musicians.

Q. 8. What would you understand by the term "A copy of a musical composition," interpreting that phrase in accordance with the usage of the art, or as it would be understood by musicians?

A. A representation or reproduction of the original in such
537 manner as could be readily or reasonably interpreted by musicans. Instead of "interpreted" I should say "read."

Q. 9. Will you explain why you prefer to change the word "interpreted" to the word "read"? Is there any ambiguity or double use of the word "interpret" among musicians, which makes you prefer the use of the other word?

A. I use the word "read" instead of "interpreted" because it applies to the actual fact of recognizing the piece, in contradistinction to the performance of the same.

Q. 10. What means are employed by musicians for thus representing their musical ideas in the form of musical compositions, so that they can be read? What name would you give to the means employed for this purpose?

A. The use of certain well-established signs and symbols, such as notes, clefs, the staff, the bar, the signs of tempo.

Q. 11. Do all these means which you have mentioned belong to or constitute parts of what are commonly called a system of musical notation?

A. Certainly.

Q. 12. Please state what you consider necessary to constitute an adequate system of musical notation—what elements, characteristics or features of the musical composition is it necessary to provide representation for, in such a system?

A. The elements which are necessary to provide a system of musical notation are such as I have already mentioned, consisting, as they do, of the most perfect method which is known to the musician at the present day. The most highly important element I should say to be that of pitch, which is represented by the position of the notes on the staff. Following this comes the necessity of measurement by
538 bars, which gives us the division in metrics. These bars may again be subdivided into so many different feet, as in poetry. The eye is also appealed to, and the senses and the intelligence, by the grouping of notes, either in melodic formation or in chord structure, which makes for the musician a definite picture of the material before him, without necessary recourse to any instrument.

Q. 13. To which of these features or characteristics of a musical composition, as you have stated them, does the length of duration of the treble notes belong?

A. To the bar formation. I might add that only refers to one bar, whereas each individual note may have its own specific value.

Q. 14. Then, I understand, that the system of notation, to be adequate, should comprise means for indicating or method of indicating the duration of each note or separate tone of the composition? If this is not correct, will you explain?

A. The bar formation is the only modern accepted system of musical notation with which I am familiar.

Q. 15. In the ordinary system of notation, which I will refer to as the "staff and bar notation," there are employed notes which are commonly named whole notes, half notes, quarter notes and other fractionals. Is the provision in this system for indicating the lengths or durations of the notes respectively included under your term of bar formation as meeting one of the essential requirements of an adequate system of notation—or, is the representation of whole and fractional notes an additional provision of this system, to be distinguished from what you mean by bar formation?

A. The bar formation is the most important part of the structure of a musical composition, because it is that which establishes the rhythm. Included in the bar formation are notes of different
539 duration, which form, as I said, the metrical feet, themselves being of almost equal value in the sense of rhythm.

Q. 16. Are you familiar with the modern form of piano-players or self-playing instruments which employ perforated sheets to control their action?

A. To a moderate extent.

Q. 17. Please state whether these perforated sheets in their structure as related to the music to be performed or produced by means of them meet the requirements of a system of musical notation. Give your reasons for your answer.

A. They can in no sense meet these requirements for the musician, for the very reasons which I have hitherto stated in my definition of the form of a musical composition.

Q. 18. Please specify in what respects you consider these perforated sheets or rolls deficient as copies of musical compositions or means of presenting them so that they may be read.

A. Chiefly because they are impossible to be read.

Q. 19. Are there any of the essential characteristics of a musical composition which are indicated so as to be read from these perforated sheets, and are there any which are not indicated at all, so as to be read?

A. There are no musical characteristics, as referring to the shape or duration of notes; the only resemblances I can see are the uses of certain familiar terms regarding color and tempo.

Q. 20. Assuming that the piano-player or machine with which it is to play the piano is constructed so as to require the perforations of the sheet to be ranged in the regular order of the chromatic scale, from one side to the other of the sheet, in what respect would the perforations fall short of the requirements of a system of notation as to indicating pitch so as to be read?

540 A. There are no lines upon the sheet which in any sense indicate pitch.

Q. 21. Is it possible for the musical performer to derive reliable or sufficiently accurate information as to the pitch of the notes from the position from right to left or in the width of the sheet of the several perforations?

A. It certainly would not be for myself, nor have I ever heard of anybody who could.

Q. 22. Is there any means in the perforated sheet for indicating what is indicated by the bar formation in the ordinary staff and bar notation?

A. Will you let me see one of the perforated sheets?

Q. 23. I hand you here a perforated roll for the musical composition entitled "Little Cotton Dolly."

A. Absolutely none, for the reason that the imaginary bars run transversely on this roll of paper, and are not so indicated.

Q. 24. You mean that if the division of bars were to be imitated or reproduced on the perforated roll, it would be by transverse lines thereon?

A. Yes.

Q. 25. Do you find any means, then, on the perforated roll for indicating the rhythmic formation of the musical composition?

A. None whatever, as far as my intelligence is concerned.

Q. 26. Is there anything in the perforated roll structure indicating the melodic formation or chord structure which you referred to as one of the necessities met by the ordinary staff and bar notation?

A. Not to my mind as a musician. As a matter of common sense, I can see where a certain line of perforation runs to the right or to the left, or where certain perforations seem longer or shorter than others. Nothing, however, to indicate any structure from the musician's standpoint.

541 Cross-examination by COMPLAINANT'S COUNSEL:

X Q. 1. Judging by your fifth answer, I take it that you distinguish between a musical composition and the record, or written record of such composition. Am I correct?

A. It is rather difficult for me to see your point. If I can explain that a poem is one thing when it is printed and another when it is read, but that they are both the property originally of the man who composed it, that is to say, the idea and the visible manifestation of the idea, then I should say there is the same difference in regard to what you have asked—merely a difference of terms.

X Q. 2. No, this is not a difference of terms. It is a material difference. The one is the thing itself; the other is the wrapping paper in which it is wrapped up. I suppose you agree with me that it is possible to conceive of a musical composition of which there never was and never will be, using your term, a *visible* manifestation. Am I correct?

A. Yes, in one respect. But when you say one is the thing, the other is the wrapping paper in which it is wrapped up, I would add that you are making the thing itself merely a piece of wrapping paper upon which there are no symbols that the musician can read.

X Q. 3. Have I asked you about perforated rolls?

A. No.

X Q. 4. I take it that we are then agreed that it is conceivable that a musical composition can exist without any visible manifestation thereof, or in other words, without any written or printed record?

A. Yes.

X Q. 5. Referring to your seventh and eighth answers, do you mean to say that a musical composition, say any one of Beethoven's sonatas, arranged in the form of a perforated roll is at the
542 present day incapable of *interpretation* by musicians, with innumerable self-players and pianos accessible to everyone?

A. I should say that the musical sounds can be properly reproduced, the interpretation depending upon accessories.

X Q. 6. And if a skilled musician would hear such a reproduction he could put such production in the form of a written musical notation, could he not?

A. Yes.

X Q. 7. Do you believe, in view of your seventh answer, that musical compositions are intended only for musicians?

A. No, certainly not.

X Q. 8. Why, then, do you define a musical composition to consist of a series of musical ideas so arranged as to be capable of interpretation by musicians, when neither a visible manifestation is a necessary element of a musical composition and a musical composition is not exclusively intended for musicians?

A. Because a musical composition, in my sense of the term, cannot be either read nor properly interpreted by one without knowledge of music. If a composition is not in print it is not, to my mind, within the meaning of the term "a musical composition."

X Q. 9. Professor Gow, of Vassar College, defined a musical composition to be an orderly combination of musical tones, renderable by musical instruments or the voice. Do you differ from this definition?

A. It is correct as far as it goes, but it is not practicable for such compositions to be performed without the visible text.

X Q. 10. Then, in your opinion, the paper and ink and the printed notes form part of a musical composition, do they?

A. They certainly form the true statement of that com-
543 position, because if played by ear it may not necessarily be the same piece, and until a record is made of some such composition it exists in a very precarious state, if it exists at all. Such is the history of all folk songs.

X Q. 11. Then the only difference would seem to be that musical compositions, of which we have printed records in the ordinary form of staff notation, can be rendered more perfect than musical compositions, such as folk songs, of which there are no printed records. Is that correct?

A. The printed records are more precise.

X Q. 12. Are the configurations of a painting intended for the ear or eye?

A. Intended for the eye, I should say, but not for the eye alone. The effect of music is merely upon the several senses by means of the ear. In the same way the effect of a painting upon the several senses is by means of the eye.

X Q. 13. Are the sounds of a musical composition intended for the ear or the eye?

A. Depending upon whether you are playing or reading it. To the educated musician the effect of reading it or of playing it has the same value; that is to say, the mental ear hears the sounds which the eye sees and distinguishes.

X Q. 14. But whether you read music or play it, the ultimate object is to produce the musical sound to be heard either by the mental ear or audibly by the physical ear?

A. Yes; I think so.

Signature waived.

544 DUDLEY BUCK, a witness called in behalf of the defendant, being first duly sworn, testifies as follows:

Direct examination by DEFENDANT'S COUNSEL:

Q. 1. Please state your name, age, residence, and occupation.

A. Dudley Buck; age sixty-four; residence, 193 Columbia Heights, Brooklyn, N. Y.; occupation or profession, composer.

Q. 2. Will you kindly give us the titles of some of your best known compositions?

A. "The Light of Asia," "The Legend of Don Munio," "The Golden Legion." This may, perhaps, be sufficient.

Q. 3. That will be sufficient, Mr. Buck, inasmuch as we could ourselves enumerate a large number. Are you familiar with the modern instruments commonly called piano-players or automatic players, which employ what are called perforated rolls to control their action?

A. Only in a superficial way.

Q. 4. Can the perforated rolls used in these instruments be practically used by musicians as substitute for the customary printed score for playing or singing the music which they would produce if put in the machine?

A. In my judgment, never.

Q. 5. What do you consider necessary in a system of musical notation in order that it may serve the purpose of presenting a musical composition so that it may be read and understood by musicians, that is, what features or characteristics of the composition must it be adapted to present?

A. It must appeal to the brain, through the eye—which the perforations don't.

545 Q. 6. What elements which go to make up a musical composition are presented to the eye in the common staff notation?

A. The same elements which are presented to the mind in our ordinary print, poetry or prose.

Q. 7. Leaving out of consideration what may be called the soul of music, and considering what might be called the physical, or, perhaps, even mechanical element, that can be analyzed, will you name the characteristics of a musical composition which are pre-

sented by the different features of the ordinary staff notation, such as the notes, lines, bars, etc.?

A. If I understand the question, we must have something appeal to the eye before it does the brain, following which it's a matter of course that the recognized staff notation, with all that that implies, must be the only intelligible one, from the reading standpoint.

Q. 8. What is there in the ordinary staff notation which conveys the idea of pitch to the reader?

A. The height or depth of the notes on the staff.

Q. 9. The ordinary staff notation has means of indicating the relative duration of different notes, has it not?

A. Certainly.

Q. 10. What means are there in the ordinary staff notation for indicating the rhythmic formation or character of the composition, and the periodic recurrence of accent and the like?

A. Indications of measure as to what a given measure contains.

Q. 11. Does the ordinary staff notation have means of indicating the melodic formation of the composition, or the relation of successive notes to each other in particular ways, as required by the musical ideas?

A. Of course.

546 Q. 12. Is there anything in the structure of the perforated sheets used by these automatic instruments by which the pitch of the notes intended to be produced by the respective slots or perforations may be known to one attempting to read the perforated sheet by eye?

A. I should say I cannot conceive that it could be.

Q. 13. Is there anything in the structure of the perforated sheet corresponding to or serving the purpose of the division into measures of the ordinary staff notation, or in any way indicating to the eye the rhythmic formation of the composition?

A. Not the slightest, to my mind.

Q. 14. Is there anything in the perforated roll which indicates to the eye the melodic formation of the various phrases, or of the composition as a whole?

A. Answering for myself, as I only can, it don't indicate anything whatever musical.

Cross-examination waived.

Signature waived.

NEW YORK, *May* 14, 1903.

Testimony resumed pursuant to adjournment.

Present: Counsel, as before.

GEORGE WILLIAM WALTER, a witness called in behalf of the defendant, being first duly sworn, testifies as follows:

Direct examination by Mr. BURTON:

Q. 1. What is your name, age, residence and occupation?

A. George William Waiter; of competent age, over fifty; residence, Washington, D. C.; occupation or profession, organist.

Q. 2. I understand that you have devoted considerable at-
547 tention to musical mechanism, and are somewhat an expert in that particular department of music. Am I correct?

A. I have made a study of musical mechanisms since 1865.

Q. 3. You are in the habit of composing music to a considerable extent, are you not?

A. I compose only intermittently—when I consider the musical ideas worth conveying to others.

Q. 4. Do you give instruction in music?

A. I do not. I have no pupils. All my clients are professionals who have pupils of their own, and who consult me for their professional interest. I receive fees, and not tuition.

Q. 5. Are you familiar with the modern instruments commonly called piano-players, or self-playing instruments which employ perforated sheets or rolls to control their action?

A. Yes, in general; but I am more familiar with the principles upon which they operate than with any of the details of particular instruments of that sort.

Q. 6. From your familiarity with the principles of construction of such instruments, and with the structure of the perforated rolls which control them, please state whether such perforated rolls can be made to serve, or do practically serve the purpose of what is commonly called printed music, as a guide to a player or singer in reproducing with the voice or on an instrument, the music which the perforated roll is adapted to reproduce when applied to its proper instrument.

A. The perforated roll occupies at the self-playing instrument the position—that is, performs the function—of a performer on an instrument not self-playing.

Q. 7. If one of these perforated rolls were mounted where its perforations could be followed by the eye, but without being so
548 connected with the instrument as to control its action, could a performer, by following the perforations with the eye, understand the music so as to play it by hand?

A. There is no music to follow—the perforations are not music.

Q. 8. Do the perforations in these perforated rolls sustain any such relation to the music, or to the common expression of such music by staff notation, as to convey a knowledge or understanding of the score when followed by the eye of a perfomer?

A. The only relation they sustain is to the self-playing instrument. As they are not the expression of music they cannot be read as music. These statements are not a matter of opinion or belief on my part, but are based on the best knowledge I have of the structure of musical instruments.

Q. 9. Will you please explain somewhat in detail why you do not consider the perforated rolls or the perforations as music, and what you mean by the perforations sustaining no relation except to the instrument for which they are made?

A. The perforations in these rolls are arbitrarily arranged with exclusive reference to a special model of a particular class of self-playing instruments and if capable of effecting a recognizable per-

formance on that particular instrument of any certain given musical composition, the same roll would, if applied to a model differing from that for which it was made, produce cacophony, or at least an unintelligible jargon of sound, and possibly in some models of instruments, no sound at all. The perforated roll is merely a physical controller of mechanism.

Q. 10. Then, as I understand you, the perforated rolls are not music in the sense in which that term is used in the phrase "sheet music," at least because the perforations of themselves apart
549 from or without a full understanding of the construction of the particular machine for which the roll is made, do not correspond to any particular note or portion of the musical composition which might be produced by them on the right instrument. Do I correctly understand you?

A. They do not represent any musical note. Music is written on "staves" of five lines, has measures, bars, pitch, duration, intensity. The rolls have none of this.

Q. 11. Will you please give us a definition of a musical composition?

A. To me a musical composition is thought expressed in tones, with rhythm.

Q. 12. Within the scope of your definition may a musical composition exist in the mind of the composer before it has and without having audible or visible expression?

A. To the true musician, always. Some composers write their musical notation without a thought in advance of what they are to compose.

Q. 13. Which do you consider the true musician, then, the one whose musical conception is clearly existent in his mind before it is written, or the one who has no musical thought developed except as he writes it?

A. The true musician should first consider whether his musical thought is worthy of transmission before putting the same into musical notation. Of course, the thought in such case must exist beforehand.

Q. 14. When a composer, having developed his musical conception so that it exists clearly in his own mind, gives that musical conception such audible expression as is possible by the voice or by a musical instrument, and another person with adequate musical capacity to comprehend it hears it, would it be correct or proper to call the derived conception which such hearer would thereby gain of the composition a copy of the musical composition?

550 A. No; it is merely an impression of the composer's idea. Were the second party to attempt to reproduce said idea it would be modified by his own humanism and the medium through which he chose to interpret it.

Q. 15. What is necessary to constitute a copy of a musical composition?

A. Usually the composer prepares an order of musical notation upon ruled music paper of the ideas *he* believes worth preserving, and this constitutes what is called the original manuscript. From this

what are called copies can be prepared with pen and ink or set up in type.

Q. 16. How much of the particular details of the process of making a copy which you have outlined in your last answer are essential to constitute the thing finally produced a "copy?"

A. The proper location of the elements of musical notation on the paticular staves to which they should be assigned.

Q. 17. I understand, then, that in order that there may be a copy of a musical composition there must first have been an original visible presentation of such composition in some intelligible form of notation, such as the staff notation to which I understand you to have alluded in your answer. Do I correctly understand you?

A. To me such things are not copied; they are imperfect representations of the composer's original ideas. They are what are called copies, as I said.

Q. 18. In order to make such representation as is possible of the composer's original musical conception some conventional system of notation is necessary, is it not?

A. Yes; it is.

Q. 19. It being understood that the full representation or expression of the composer's musical thought is impossible, will
551 you please tell us what elements or features or characteristics of such musical thought must be provided for in any system of notation in order to get such representation as is possible?

A. The present system of musical notation is already burdened with 4,000 signs and 5,000 terms, and these oftentimes are insufficient to express the composer's idea. Moreover, a composer is often unable to express his ideas as he wants them, just as a painter often fails in the same way to come up to his ideal.

Q. 20. Any system of notation must comprise a conventional method of indicating pitch?

A. A musical notation is incapable of indicating pitch.

Q. 21. In view of the usage in the ordinary staff notation of indicating pitch by the relative position of the notes on the staff, qualified by the signature, will you please explain what you mean by your last answer?

A. The signature and the position of the notes on the staff do not indicate pitch.

Q. 22. Will you please explain what they do indicate?

A. They indicate sounds in certain relations to each other. The pitch of the sounds makes no difference in their relationship.

Q. 23. You mean their relationship as indicated by their positions?

A. The sounds are all supposed to be of the same pitch.

Q. 24. In common speech, even among those who have some understanding of ordinary music, is not the word pitch used to express the characteristic of musical tones in respect to the rapidity of vibrations to which they correspond or by which they are produced or made sensible to the sense of hearing?

A. In popular use musical pitch has relation to the height or

555 X Q. 11. It is a fact, is it not, that at best every so-called copy of a musical composition, however perfect it may be, is but a poor feasible representation of an author's musical composition?

A. It is not so poor a representation of the author's composition as it is of the author's idea, because we can take a photographic reproduction of the original.

X Q. 12. Would a photographic reproduction of an author's manuscript be such a copy as would enable anyone to express perfectly the author's musical conception?

A. The expression is dependent entirely upon the musician. The copy is a mere guide as to where his fingers shall go on the instrument not self-playing. I assume that you refer to instrumental compositions.

X Q. 13. Then I take it that you mean to testify that even from a photographic reproduction of an author's manuscript it is almost impossible to reproduce correctly the author's musical conception?

A. In reproducing the author's musical conception a true reproduction is hampered by the humanism of the performer and the imperfections of his instrument. Wherefore different performers give different interpretations of one and the same composition.

X Q. 14. And your last answer is true, even if the different performers are celebrated artists?

A. It is a common thing, in forty years' musical observation, on the occasion of some great instrumentalist visiting this country, for instrumentalists of his class to speculate among each other as to what interpretation the coming virtuoso will give to some highly classical composition of one of the masters. The various previous interpretations of it that have been given by others will also be compared. Both performer and instrument are interfering mediums, through which the original thoughts of the composer must
556 first filter before they can reach the musically blind, who will have to resort to this mode of interpretation. The true musician does not need to play, or have a piece played, to know how it sounds. He exercises the translation of sense; he can see with his ears; he can hear with his eyes.

X Q. 15. In your tenth answer you say, "Music has measures, bars, pitch, duration, intensity." You mean written music or sheet music?

A. I do.

X Q. 16. In your fifteenth answer you say that usually the composer writes music in the form of the ordinary style of musical notation. It is conceivable, is it not, that a composer might write music in a form of notation invented by him, just as a stenographer uses hieroglyphics that are not known to the ordinary individual?

A. If he did, only he could decipher them.

X Q. 17. But if he at the same time gave a key, or the tools wherewith to decipher his hieroglyphics, then others could read it. That follows, does it not?

A. I have never known such a key to be given. I do not know whether others could decipher it or not. The probability is he

would fail to give a key. Such stenographic form of writing is but a temporary expedient, done for the purpose of giving the author an opportunity of tiding over an emergency.

X Q. 18. But when an author uses such form of notation—stenographic, or by whatever name we choose to call it—if he should teach his amanuensis how to decipher such notes, that is conceivable, is it not?

A. It would take longer for him to explain to his amanuensis and it would take longer for his amanuensis to learn than it would take for the author to write out his composition.

X Q. 19. Do you understand that the word- "musical
557 composition" *is* a very much broader term than the vulgar popular expression "sheet music"?

A. What is called "sheet music" is a thing. A musical composition is an arrangement of thought—better be called a creation of thought. It is created and arranged in putting together.

Signature waived.

JOHN H. HUGHES, a witness called on behalf of the defendant, being first duly sworn, testified as follows:

Direct examination by DEFENDANT'S COUNSEL:

Q. 1. What is your name, age, residence and occupation?

A. John H. Hughes; age, forty-one; residence, 96 Milton street, Brooklyn, N. Y.; occupation, arranger for self-playing instruments.

Q. 2. By whom are you employed, and how long have you been with them?

A. I am employed by the Auto-Music Company of New York, and have been for about three years past.

Q. 3. Has your employment been the same during all this time?

A. It has.

Q. 4. Have you ever worked as an arranger before you commenced with the Auto-Music Company, and if so, with whom and for how long?

A. I have, for the Auto-Banjo Company, for about two years immediately preceding my employment with the Auto-Music Company; for about five years previous to and immediately preceding my employment with the Auto-Banjo Company I was employed in a similar capacity by the Aeolian Company. My total experience in this line covers about twelve years.

Q. 5. From your familiarity with perforated rolls, are
558 you able to read them by the eye alone, so as to know the sounds and order of sounds positively?

A. There is nothing in a perforated roll to indicate a sound.

Q. 6. Can you from the perforated rolls determine the pitch of the notes intended to be represented by the perforations?

A. No.

Q. 7. In my last question I intended to include a statement that the determination of the pitch was to be by the eye alone, without the aid of gauges or templets. With this explanation of the question, what would be your answer?

A. There is nothing to indicate to the eye what the note is.

Q. 8. So I understand you, then, that without the aid of a templet or rule you cannot fix the pitch of the perforations. Is that correct?

A. It is.

Q. 9. Nor the relation of one note to another?

A. No.

Q. 10. Does the length of the perforation indicate accurately the length of the note to which it corresponds in the printed score?

A. In one case the length of the perforation for a note may be half an inch and in another the length of such perforation for the same note be a full inch.

Q. 11. Is it, or is it not a fact that in arranging the perforations for one of these perforated rolls that the perforations for notes of the same length will often vary very greatly in the same piece?

A. No; not in the same piece.

Q. 12. How is it about the arrangements made by others? Is it not true in their case?

Objected to unless the witness is shown to have knowledge of the arrangements made by others.

559 A. Every arranger tries the best to reproduce the piece of music he is arranging.

Q. 13. Are you familiar with the work of other arrangers?

A. I am. I have examined it.

Q. 14. Is it, or is it not the fact that in the work of other arrangers the perforations for notes of the same value will vary in the same piece in their length?

A. It is a fact.

Q. 15. When you are arranging the cutting for a piece of music is it or is it not the fact that you frequently change from the musical score by adding to or substracting from portions of the store?

Objected to as immaterial.

A. It depends entirely on what instrument we are arranging for, and what scope that instrument has. If the music is longer than the scope we must condense it down in order to get it inside of the scope of the instrument we are arranging for. In case there be an instrument which has no chromatic scale, and the composition calls for the chromatic notes, we must change them to some other note.

Q. 16. Are there any other instances you can name in which you are obliged, or find it desirable, to change the cutting so that it does not agree entirely with the score, either in respect to particular notes or the notes of a phrase taken together?

A. When a composition is higher or lower than the instrument we must condense the range of the notes so as to get within the compass of the instrument.

Q. 17. Do you ever have occasion to change the length of the notes—that is, cut a short or a long note in place of a long or short note in the score?

A. When two consecutive notes come, the first must be cut shorter than the other in order to get the repeating note.

560 Q. 18. What do you do where you have a slurred note?

A. It depends entirely upon what instrument you are cutting for. If for a piano, it can be lapped over, that is, the slot for the first note can be lapped over the second—that is, made longer than its regular length; if for an organ, it cannot be lapped, because the last end of the slot in an organ is as loud as the first; therefore two notes will sound; in the piano the sound dies away.

Q. 19. Is it a fact that a perforated roll made for a piano is not adapted to be used in an organ?

A. It is a fact.

Q. 20. I hand to you two perforated rolls. Please look at them and state whether you know the arrangement.

A. Yes, I arranged them.

The rolls mentioned are introduced in evidence as "Defendant's Exhibit Hughes Rolls, Nos. 1 and 2."

Q. 21. By whom were these rolls made—by what company?

A. The Auto-Music Company of New York.

Q. 22. Are these rolls arranged for the same instrument, or different instruments; and, if so, what instruments?

A. "Exhibit Hughes Roll No. 1" is arranged for the automatic banjo, "Exhibit Hughes Roll No. 2" is arranged for the Cecilian piano-player.

Q. 23. Both of the machines you have referred to have been on the market quite some time and have been sold in large numbers; is that true?

A. It is.

Q. 24. And these rolls have been sold on the market for operating the machines mentioned, have they?

A. Yes, for a long time.

Q. 25. In Exhibit No. 1, do all the perforations represent tones to be produced by the instrument?

561 A. They do not.

Q. 26. About what proportion of them represent tones to be produced?

A. The round holes control the sound-producing devices, and the slots the pitch.

Q. 27. I understand from your testimony that in this banjo cutting two perforations are necessary to produce a desired sound; is that correct?

A. No. In one case, when the picker picks an open string, he reproduces sound with one perforation. If there is a fret, we must have two perforations to bring out that sound. The perforations, this one, for example (referring to one of the perforations in the left-hand row, Exhibit No. 1), does not represent a sound, but an action, that is, the action of the picker picking the string so that you get the sound. The long slot, which I have marked 2, controls the fret which fixes the pitch of the sound, or, in other words, the desired note.

Q. 28. Then, as I understand the construction of the banjo, there

are four strings, four pickers and forty fret controllers used in these automatic banjos; is that correct?

A. It is correct.

Q. 29. Do you always arrange any desired note, in cutting for this automatic banjo, on the same string?

A. We do not.

Q. 30. Upon how many different strings can you?

A. On the third string we have four duplicate notes, which we have already on the fourth; on the second string we have seven duplicate notes, which we have already on the third; on the fourth string we have eight duplicate notes, which we have already on the second; in all we have nineteen duplicate notes. There are four half notes we can get—on the first, second and third string.

Q. 31. I notice that the sound-producing perforations in
562 this perforated roll No. 1 are all of the same length. What do you do when you wish to continue the sound and produce a long note?

A. We use two picking perforations, alternating, and two fretting perforations, and prolong the note by means of trilling two notes in unison.

Q. 32. Then I understand that there are four perforations in different longitudinal lines on the sheet that are required to produce the same note of any given pitch; is that correct?

A. It is correct.

Q. 33. Will you indicate these instances on the roll and mark them?

A. I have marked on the roll the picker perforations of one string as "A" and the corresponding pitch-producers "A-1" and "B-1."

Q. 34. On an open string, how do you produce a long note without the use of a fretter or second picker?

A. It cannot be done.

Q. 35. Then, commonly, in practice it is necessary to have a picking perforation and a fret perforation for a single note, and on a sustained note to duplicate this again; is this correct?

A. It is correct.

Q. 36. Then in a piano arrangement of the perforated roll, you do, with a single perforation what it takes two or even four to do in the banjo music?

A. In a banjo we must have three if one of the strings is open, otherwise four; in the piano, but one is necessary.

Q. 37. We have spoken of these as three or four perforations in a sustained note, but as a matter of fact the number is increased proportionately to the length of time that the note is sustained, is it not?

A. Yes, as to the pickers.

563 Q. 38. You arranged, I believe, Exhibits 1 and 2. Please state whether or not the results obtained, to the ear, are the same on the two different instruments.

Objected to as utterly immaterial. Nobody contends that a piano and a banjo sound the same.

A. They are not.

Q. 39. In what respect do they differ?

A. One is a banjo and the other a piano.

Q. 40. Do they play the same tune?

A. They may play the same tune, but with a different arrangement.

Q. 41. As I understand it, Exhibits Nos. 1 and 2 are an arrangement for their respective instruments of the same composition. Do they reproduce this composition alike, as far as tune or air is concerned?

A. As far as the air is concerned.

Adjourned to Friday, May 15, 1903, at 11 a. m.

NEW YORK, *May* 15, 1903.

ADOLF L. JANSON, heretofore called and sworn, recalled, testifies as follows:

Q. 48. Are you still connected with the office of the Apollo Company in New York City as when you last testified?

A. Yes, sir.

Q. 49. Do you use the automatic piano-players themselves to any extent?

A. Yes, sir.

Q. 50. Do you also play the piano or other key instruments by hand?

A. Yes, sir.

Q. 51. Do you sing?

A. Yes, sir.

Q. 52. What, if any, is the effect of the use and opportunity for use of the automatic players and perforated rolls therewith upon your own purchases of and inclination to purchase the music in the ordinary form of notation—that is, sheet music or other form for playing or singing without the use of the automatic players?

564

Objected to as incompetent and speculative, asking for mere opinion and immaterial to the issues.

A. In my personal case I have an Apollo at home and use the perforated rolls, and in several instances have purchased songs and instrumental music after having heard them played on the Apollo, for myself to play and sing, in addition to the Apollo.

Q. 53. Have you had opportunities to observe the effect in this respect upon other purchasers and users of the Apollo or upon other persons hearing music played on the Apollo; I mean the effect, if any, to cause or prevent, increase or diminish their purchases of the sheet music in ordinary staff notation?

Objected to.

A. In several instances I know personally where people—owners of the Apollo—have purchased sheet music after hearing same on the Apollo.

Q. 54. Is this a rare or common occurrence in your experience during your connection with the self-player business?

A. It is a common occurrence.

Q. 55. If you can this moment recall any particular instances of persons whom you know have thus purchased sheet music after having heard the music performed with the self-player, will you mention the names of such as you happen to recall?

A. I can recall the names of two parties, one Mr. Arbour and Mr. Fowler.

Q. 56. Where do these parties live, respectively?

A. Mr. Arbour lives on McDougall street, Brooklyn, and
565 Mr. Fowler on St. Nicholas avenue, New York City.

No cross-examination.

Signature waived.

United States Circuit Court, Southern District of New York. In Equity.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

It is stipulated by and between counsel for the respective parties hereto:

(1) That prior to the commencement of these suits a contract was made and entered into by and between the complainant and the Aeolian Company of New York, incorporated under the laws of Connecticut, identical in terms with the contract heretofore offered in evidence as "Defendant's Exhibit Summy-Aeolian Contract (1, 2 and 3)," and that said contract still continues in force between said parties.

Dated, May 16, 1903.

DICKERSON, BROWN & RAEGENER,
Counsel for Complainant.
CHAS. S. BURTON,
Counsel for Defendant.

566 NEW YORK, *May* 16, 1903.

Met pursuant to adjournment.

Present, counsel as before.

Direct examination of the witness HUGHES resumed:

Q. 42. Do you know whether the perforated rolls made for one player will fit every other player, so as to produce the same piece of music therefrom?

A. They do not fit.

Q. 43. Are the different automatic players for musical instruments which are in market all laid out in the regular order of the chromatic scale?

A. They are not.

Q. 44. If you were shown a perforated roll, without being told for what player or instrument it is cut, the roll having no label to indicate that, could you from the roll itself ascertain the order in which it was laid out, that is, whether it was in chromatic order or not?

A. I could not.

Q. 45. If you were given a perforated roll having a l label to show for what instrument it was cut, but either having no label as to the title of the piece, or having a title of a piece that you did not know, could you from the roll itself, without other help, work out the score in the ordinary staff notation of the piece?

A. I could not.

Q. 46. In the nature of the case, would it be possible for any one, with the expert knowledge which an arranger has, to do this?

A. No.

Q. 47. Have you ever had occasion to try this, if so, state the occasion and the experience of your attempt?

A. Yes, I have had occasion to try it. On December 4th, 1892, the factory of the company I am now working for—The Auto Music Company—was partially burned. Many of the stencils were
567 damaged to such an extent we could not tell what they were. In order to find, if possible, what they were, I tried, with the help of the scale, to put them into manuscript, but there was nothing to indicate to me whether they were eighth notes, half notes or whole notes; and therefore I was unable to tell what they were.

Q 48. From being unable to find out what they were, could you use the stencils further, or what did you have to do?

A. We had to destroy them.

Q. 49. I understand that in that instance you had the advantage of having the scale with which these stencils were originally laid out. If you had not had that scale, would the matter have been any more difficult?

A. Yes.

Q. 50. Would it be possible for anybody to take a perforated roll such as this banjo roll—called "Exhibit No. 1" in yesterday's testimony—and find out without a label, that is, find out from an examination of the roll itself, what piece of music it is cut for, even if they knew in advance it was cut for an automatic banjo?

A. It would be impossible.

Q. 51. Even if the piece of music were one so well fitted for the banjo that no variations would have to be made in order to get within the scope of the instrument, that is, even if every note in the score were in some proper manner represented in the perforated roll, would it be possible for the perforated roll to work out again the original score?

A. No, it would be impossible.

Q. 52. Have you examined Apollo perforated rolls, and do you know whether or not in them the slots for notes of the same indicated length on the score, as ¼ notes, or ½ notes, or ⅛ notes, are kept the same throughout the same piece, or whether there is wide variation?

568 A. They are not the same; they vary.

Q. 53. Here is a perforated roll for the Apollo, No. 4,559, marked "Little Cotton Dolly"—a duplicate of the one introduced in evidence as the infringement complained of in one of these suits. You have at my request, with the score, gone through this roll, and made marks indicating the sub-division into measures corresponding to the sub-division of the measures on the score. Will you state what the result of your comparison of the slots of this roll with the score of the sheet music is as to the variation or uniformity with the length of the slots for notes of the same indicated length on the score. In answering, please indicate the measures referred to, by number, and mark the particular notes to which you may wish to call attention with consecutive numbers, and mark the slots which correspond to them in the roll with the same numbers?

A. On measures 6, 7 and 8 of the score, there are ¼ notes which I have marked 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12, and I have marked the corresponding slots in the roll with the same numbers. On measure 10 of the score there are ¼ notes in the base which I have marked Nos. 13, 14, 15 and 16, and I have marked with the same numbers the corresponding slots in the same roll. The ¼ notes in measures 6, 7, and 8 of the score are staccato, but the ¼ notes in measure 10 are not staccato. The slots for the staccato notes are cut the same length as the slots for the full ¼ notes, and they are each ten millimeters long. In measure 11 there is a ¼ note in the bass, which I have numbered 17, having exactly the same value in the score as those numbered 13, 14, 15 and 16 in measure 10, but the slot for it is twenty-two millimeters long, against ten millimeters for the others. In the same measure 11, there are triplet ⅛, which I have numbered 21, 22 and 23 in the treble of the accompani-
569 ment. The corresponding slots on the roll I have given the same numbers. Each of these notes has the same value on the score, but slot 21 for the first of them is seven and one-half millimeters long, slot 22 for the second one is twenty-nine millimeters long, and slot 23 for the third is only five and one-half millimeters long. In measure 14, in the base of the accompaniment, there is a ¼ note which I have numbered 24, and in the treble of the accompaniment there is a ½ note which I have numbered 25, giving like numbers to corresponding slots on the roll. The slot for the ¼ note is ten millimeters long, and the slot for the ½ note is thirty-five millimeters long. In measure 25, a ¼ note in the base I have numbered 26 and marked the corresponding slot in the roll 26; in measure 26 the first ¼ note in the base I have marked 27 and given the same number to the corresponding slot. In the same measure 26, the third ¼ note in the base I have marked 28 and similarly numbered the corresponding slot. These three notes 26, 27 and 28 have absolutely the same indicated value on the score, but slot 26 twenty-one millimeters long, slot 27 is twelve millimeters long, and slot 28 is only nine millimeters long. In measure 27, the first ¼ note in the base I have numbered 29, and given the corresponding slot the same number. In the treble of the accompaniment in this measure, there is a ¼ note which I have numbered 30 and similarly num-

bered the slot for it. Slot 29 is twenty-three millimeters long, and slot 30 is eighteen millimeters. Instances of this kind occur constantly throughout this roll, so it would be impossible to tell from the length of the slot what was the length of the note in the score.

Q. 54. Please take now the score of the "Kentucky Babe," and compare it with the perforated roll which you have already subdivided into measures by means of the score, and point out
570 any instances which you find of variation in the length of the slots for notes of the same indicated length in the score?

A. In measure No. 9 I have marked ¼ notes in the bass 1, 2, 3 and 4, and the corresponding slots on the roll I have given the same numbers. These notes are all the same indicated value in the score, but the slots for them vary as follows: No. 1, twelve millimeters; No. 2 and No. 4 each nine millimeters; No. 3, fifteen millimeters. In the treble I have marked the dotted ⅛ notes 5, 6, 7 and 8; the indicated values of each of these is ¾, that of No. 3 for example. The slot for No. 3 as above stated, measures fifteen millimeters, ¾ of which would be eleven and one-half millimeters; but No. 5 and No. 6 are each five millimeters only, and Nos. 7 and 8 are each six millimeters only. A similar variation is found in the tenth measure, Nos. 9, 10, 11 and 12 in the bass being ¼ notes on the score—all of equal value. On the roll, the slot measures as follows: No. 9, fourteen millimeters; No. 10, nine millimeters; No. 11, fourteen millimeters, and No. 12, nine. In the treble clef of this measure, dotted ⅛ numbered 13 and 14, each three-fourths of the length of the ¼ notes, have slots six millimeters long. In measure 12, ¼ notes in the bass marked 15, 16, 17 and 18, all of equal value, have slots similarly numbered, varying as follows: No. 15, fifteen millimeters; Nos. 16, 17 and 18, each six millimeters. In measure 24, ¼ note numbered 19 in the bass, and ⅛ note numbered 20 in the bass—the latter of which is half the value of the former—are represented by the slots as follows: No. 19, fourteen millimeters; No. 20, two millimeters; in the same measure a dotted ½ in the treble numbered 21 should in proportion to the ¼ numbered 19 in the base be forty-two millimeters long, but it measures only thirty-two millimeters. But in comparison with the ⅛ note numbered 20, it should be only
571 twelve. In measure 25, ¼ notes Nos. 22 and 33 in the base—being of the same value—are represented by slots as follows: 22, fifteen millimeters, 23, six millimeters. In measure 33, ¼ notes in the base numbered 24 and 25—of equal value—are represented by slots 24—eighteen millimeters—and 25, six millimeters. Similar comparison may be made in measure 33, between notes and slots numbered 24 and 25; in measure 34, between notes and slots numbered 26 and 27; in measure 35, between notes and slots numbered 28 and 29; in measure 36, between notes and slots numbered 30 and 31. In measure 41, between notes and slots numbered 32 and 33. In this last mentioned measure, in the treble are dotted ⅛ numbered 34 and 35, each three-quarters of the value of the ¼ note numbered 32; but, while slot 32 measures sixteen millimeters, slot 34, instead of being 12 millimeters, is only six, and slot 35 is nine

millimeters. Similar instances occur throughout this roll, but I have only selected a few from a large number of variations.

Q. 55. I wish to call your attention again to the score and perforated roll of "Little Cotton Dolly." From the score, it appears that there is a melody for the song, and an accompaniment for the instrument, and from a casual glance through the score it appears that frequently the melody and the accompaniment contain at a given point notes of the same pitch, but not always of the same duration. Will you make comparison between the score and the perforated roll, and tell us what has happened in these instances, or what the arranger has done with respect to cutting the slots where the two scores would require inconsistent cutting?

A. In measure 11 of "Little Cotton Dolly," there is in the melody a dotted ½ "G," and in the accompaniment there are triplet ⅛, comprising two ⅛ of the same "G." It will be impossible to cut
572 the slot to hold the melody note for the length of time required by the dotted half, and at the same time break it up so as to give the triplet ⅛ required by the accompaniment. What appears from the perforated roll is, that he has sacrificed the melody for the sake of getting the repeated "Gs" of the accompaniment; but he has elongated the slot for the middle ⅛ of the triplet, which is the second "G," so that instead of being as the score requires, one-third of the length of the ¼ note marked 17 in the bass, it is fully one-third longer than the slot for that ¼ note—probably with the idea of giving back the note to the melody. In measure 18, the accompaniment has in the treble a ½ note, numbered 26, on G, and the melody has at the same point a dotted ⅛ note of the same G. The ½ note of the accompaniment held for its full time would deprive the melody of the point which depended upon the dotted ⅛, and of course he could not cut both of them in one slot. He has sacrificed this feature of the melody, but retained the long note in the accompaniment. In measure 19, the last note of the melody is a ½ note on E; the accompaniment has in the treble first a ¼ note on E, then triplet ⅛ comprising two ⅛ on the same E. He has sacrificed entirely the ½ note of the melody, saving the features of the accompaniment at this point. The arranger has taken the privilege of doubling the melody all the way through an octave above and by this means when he sacrificed any note in the proper octave he saved something of the effect by holding it in the upper octave.

Q. 56. Having this perforated roll alone without the score, and without information as to what it was or was supposed to be, would it be possible to disentangle the melody from the accompaniment or to discover that it was intended to be a melody and an accompaniment?

A. No.

Q. 57. I understand that in comparing the score of the
573 "Little Cotton Dolly" with the perforated roll and using it on the player with the piano, you have noticed that quite a number of variations or departures from the composition as presented in the score have been made by the arranger in cutting the

roll. Will you please mention and point out these variations or departures other than those which you have already mentioned?

A. On examining this roll, I have found that the arranger has left out the first four measures from the introduction; also he has taken the privilege of doubling the melody an octave higher than the score calls for all through the composition. On measure 11 the accompaniment is also doubled, which is not called for in the score. This occurs also in measure 15. In measure 22, a ritard is called for, but there is nothing to indicate such on the perforated roll; also in measure 23, a pause is called for, but the measure is exactly the same length as others in the perforation. In measure 31, the score calls for two octaves, but there are three octaves in the perforation; also in measure 38. In measure 41, the accompaniment is doubled, which is not called for in the score. In measures 47 and 54, again three octaves are on the roll, as against two on the score. The roll repeats the entire piece, so as to correspond with the two verses of the song, and all these peculiarities appear in this repetition as in the first half of the roll, showing that they were intentional, and not accidental.

Q. 58. Will you make a similar comparison between the sheet music score of "Kentucky Babe" and the perforated roll for the same complained of as an infringement?

A. In the first two measures the arranger has taken the liberty of doubling the melody an octave lower, and in measure 3 an octave higher, all of which is not called for in the score. In measures 9 and 10, the arranger has taken the privilege of adding notes, not called for in the score, in order to get three notes instead of two. According to his system of arranging this roll he could not get the consecutive 1/16 note, so he has changed every alternate note into a higher one, *i. e.*, G to A, and A to B, in measure nine, etc., in order to get the sixteenth effect. Bass notes in these measures are of equal value, but in measure nine they are much longer. In measure 12, the accompaniment is doubled, which is not called for in the score, and overbalances the melody. In measures 13 and 14, notes are added by the arranger which are not called for in the score; also the same applies here as in measures 9 and 10. In measure 24, the score calls for consecutive G, B, F, but only B occurs in perforated paper. In measure 26, the arranger has doubled the air which is not called for. In measures 27 and 28, notes are added similar to 9 and 10. In measure 29, the upper F is left out. Measures 31 and 32 are added notes, same as 9 and 10, to obtain the 1/16 effect. In measures 33 to 36, the score calls for arpeggio chords, on the first of the beat, but there is nothing to indicate such in the perforated roll; also the arranger in these measures had added notes not called for in the score. In measure 37, the middle G is not repeated as in the score. In measure 41 to 56, the arranger has taken the secondary part for the first, and has doubled the same, and in consequence the melody is entirely lost; the doubling not being called for in the score. From measure 58 to measure 64, the melody is doubled and this is not called for in the score.

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The sheet music, marked and referred to by the witness—"Kentucky Babe" and "Little Cotton Dolly"—are offered in evidence and marked "Defendant's Exhibits Hughes 3 and 4," respectively,
575 and the perforated rolls referred to and marked by him are introduced in evidence, marked "Defendant's Exhibit Kentucky Babe Roll Hughes No. 5," and "Little Cotton Dolly Roll Hughes No. 6."

Cross-examination by COMPLAINANT'S COUNSEL:

X Q. 1. If you have a scale, you can get the pitch, and with that can you not fairly read a perforated roll?

A. If I had a scale of any instrument and put it on a perforated roll, that scale would tell the name of the note for which it is intended; but a hole in a paper does not represent an eighth note, quarter note, a half or a whole note, and I could not tell what that note is.

X Q. 2. But with your recognition of the notes represented by perforations on the roll, your mental ear could hear the music and fairly well recognize the melody. That is a fact, is it not?

A. I could not in some cases.

X Q. 3. But you as a skilled arranger, could in most cases, having identified the notes by means of the scale, hear the melody with your mental ear. Is that a fact?

A. I could not.

X Q. 4. What did you mean by your preceding answer, that under the same conditions you could not in some cases recognize the melody?

A. I could not read nor recognize any of the arrangement on an automatic banjo. In other cases, when there is an instrument with but a few notes, such as the Celestina, having twenty notes, with but few chromatic notes, I could in many cases find out and know what that piece is.

X Q. 53. In the majority of cases, the arranger endeavors to reproduce the musical composition as nearly like the original as is possible, does he not?

A. He does not, but he puts his own particular interpretation on that piece.

576 X Q. 54. But if I instructed you, as a skilled arranger, to reproduce as nearly as possible, on a perforated roll, this piece, the "Kentucky Babe," like the printed piano score handed to you, you could do it, could you not?

A. I could not, without putting or adding notes to bring out the idea of the composition.

X Q. 55. As a matter of fact, you would probably make a very much better arrangement, would you not than the arranger who made the perforated roll of the "Kentucky Babe" here before us?

A. I guess I could; that is a pretty poor arrangement.

X Q. 56. Now, if you arranged this "Kentucky Babe" piece for the banjo, you would have to make numerous changes, omitting notes and adding others, in order to produce the melody intended to be produced by the author?

A. No, not for the melody.

X Q. 57. Well, what changes would you have to make for any purpose to produce a perfect score for the banjo, with that piano score before you?

A. I would have to make my own arrangement for the banjo.

X Q. 58. Why?

A. Because it is above the limit or scale of the banjo. It goes both higher and lower. Again, the banjo can produce only four notes at the same time. I can see on the piano score here as many as six notes to be played at the same time.

X Q. 59. But if you produced a banjo score of this or of any other piece from a piano score, you would produce the same melody, would you not?

A. It would be the same melody condensed down to the scale of the banjo.

577 X Q. 60. Now, in arranging a musical composition for a self-player from the printed score arranged for the piano, do you not as a matter of fact do the same thing, to wit, arrange it "to the scale of the self-player?"

A. I do.

X Q. 61. Is a printed score of the banjo arrangement of a melody a copy of a printed piano score of the same melody arranged for the piano?

A. I think it is.

X Q. 62. Assume a musical composition arranged for the piano existing in the shape of an original manuscript, and tell me whether in your opinion, a printed score of that same composition arranged for the banjo is a copy of the musical composition?

A. In my opinion, it would be the same.

Question and answer both objected to as purely a question of law.

X Q. 63. In a piano score the notes in each measure must balance, or in other words, each measure must be complete; that is a fact, is it not?

Question objected to as calling for purely expert opinion in a matter in which the witness has not been offered or qualified as an expert.

A. In my opinion, they must.

X Q. 64. But no piano-player, however great his qualifications may be, plays strictly according to the piano score before him. He makes some notes shorter and others longer than the text. That is a fact, is it not? Or in other words, does he not endeavor to interpret the composition of the author in his own way, and not limit himself strictly to the mechanical arrangement of the notes in the score.

A. He certainly does.

578 X Q. 65. Now, while in a piano score, the notes in each measure must balance and the measure must be complete, and although an artistic player does not limit himself to the mechanical arrangement of the text before him, in a self-player, it is

not at all necessary for the notes in each measure transferred to a perforated sheet to balance. That is also a fact, is it not?

Question objected to as obscure.

A. The only way I can answer that is, that a man makes his own interpretation on the perforated roll.

X Q. 66. Assume that you as an arranger are about to transfer from a piano score a measure consisting of four ¼ notes, it is not at all necessary, is it, that these four notes on the perforated score should be of equal duration?

A. It is.

X Q. 67. Is it not a fact that you cut some notes shorter in order to get a staccato effect?

A. It is.

X Q. 68. Then if you transferred four ¼ notes from the piano score to the perforated score, and desired to obtain a staccato effect on two of them, the perforations that is, two of the four, would be shorter?

A. Yes, in order to get the staccato effect.

X Q. 69. Whenever an arranger prepares an arrangement from a manuscript or printed copy of a musical composition arranged for the piano, for a self-player, he fixes the length of the shortest note in the score, say, a ¼ note, and thereafter, having a standard, he endeavors to make all his perforations of lengths corresponding to this standard, except as he sees fit to make variations to produce staccato effects or legato effects?

A. The arranger does not fix his tempo by the shortest note.

X Q. 70. By what does he fix it?

A. By his knowledge of how fast the paper travels over the tracker bar.

579 X Q. 71. And after he has obtained the knowledge referred to, does he not fix a standard length of the shortest note?

A. Not always.

X Q. 72. Does he not usually do so?

A. Yes.

X Q. 73. Could you play a banjo arrangement of a melody or tune on a piano? If not, why not?

A. It could not be done, because they are not of the same scale.

X Q. 74. So that, practically, it is necessary to make a different arrangement of the score for each instrument, if you desire to play the musical composition in accordance with the author's ideas?

A. Yes.

X Q. 75. In order to play a musical composition correctly on a flute, banjo, piano, or violin, it is necessary to specially arrange the score for each musical instrument, is it not?

A. No, it is not.

X Q. 76. It is usually done, however, is it not?

A. It is not.

X Q. 77. You mean to say that the ordinary player can play on the piano a composition arranged for the banjo?

A. I do not.

X Q. 78. Can he play it on the flute, the score being arranged for the piano?

A. He can play the melody.

X Q. 79. Can he interpret from such score the author's composition correctly?

A. As far as the melody goes.

X Q. 80. Then because of the peculiar construction and the limitation of each instrument, it is necessary that the score be
580 specially arranged for that instrument, in order that the ordinary player may interpret the composition correctly; that is a fact, is it not?

A. No. It is not. I mean to say that a violinist can play a song from manuscript without being specially arranged for the violin.

X Q. 81. And do you mean to say that the ordinary piano-player can interpret a composition in accordance with the author's ideas correctly from a score arranged for the violin?

A. No, I do not, because there can be gotten out only one note at the same time from a flute, while the pianist can get out a whole chord.

Redirect examination by DEFENDANT'S COUNSEL:

R. D. Q. 82. In your answer to X Q. 73, did you understand the words "banjo arrangement" of the question to refer to the perforated roll arrangement for the automatic banjo, or an arrangement in ordinary staff notation?

A. To the arrangement for the automatic banjo.

R. D. Q. 83. In your answer to X Q. 74, did you understand the word "arrangement" of the question to refer to the perforated roll arrangement for the different instruments?

A. Yes, to the perforated roll arrangement.

R. D. Q. 84. Then you did not mean to say that an arrangement for the banjo in the ordinary staff notation could not be played upon the piano because they are not of the same scale, but that the perforated roll cut for the automatic banjo could not be used to play the piano?

A. Yes, that's what I meant.

R. D. Q. 85. And in your answer to X Q. 74, you meant that it was necessary to make a different perforated roll for each instrument?

A. Yes, that is what I meant.

581 Recross-examination by COMPLAINANT'S COUNSEL:

R. X Q. 86. Some perforated rolls can, however, be interchangeably used upon different piano self-players, can they not?

A. I don't know of any.

Signature waived.

United States Circuit Court, Southern District of New York.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

It is stipulated by and between counsel for the respective parties hereto that defendant's proofs shall be closed on or before June 1, 1903; that complainants shall take their rebuttal proofs in September and October, 1903, no testimony to be taken during the summer, and that the case be placed on the calendar for final hearing on the fourth Monday in October, 1903.

It is further stipulated that immediately upon the close of the defendant's testimony, defendant print its record, and that complainant likewise immediately print the *prima facie* proofs by it taken, and that such printed records be exchanged on or before August 15, 1903.

Dated, May 16, 1903.

DICKERSON, BROWN & RAEGENER,
Counsel for Complainant.
CHAS. S. BURTON, *Counsel for Defendant.*

582 *Deposition of Gerrit Smith.*

NEW YORK, *May* 19, 1903.

Testimony resumed.
Present: Counsel as before.

GERRIT SMITH, recalled, testified further as follows:

Q. 40. Have you ever examined automatic piano-players and perforated rolls for them, in which the ducts of the tracker-board and the lines of perforations of the roll were arranged in other than regular chromatic order; and, if so, will you please give such a description as you are able of the arrangement of the ducts and perforations in these machines and rolls, stating the reasons, if you know of reasons, for departing from the regular chromatic arrangement?

A. I have examined three different self-players, with their respective perforated rolls, made by the same company. The first of these I may term the regular chromatic arrangement of ducts as constructed in the ordinary self-player, as manufactured by the Aeolian Company, we will say. The second self-player is constructed on a different principle and is arranged in this manner: The ducts, instead of being one continuous row of extremely narrow vent, are arranged in two parallel horizontal rows, so that the lower line of ducts is placed a trifle to the right of the upper line, for the following purpose: In cutting some fifty-eight perforations on a narrow slip of paper these perforations are brought so extremely close to one another that any slight warping or irregular running of the paper may prevent an accurate production of the tone for

which the perforations are intended. A third instrument is constructed on the following principle. The line of ducts, instead of progressing chromatically and regularly in ascending pitch to the right, is arranged arbitrarily by means of mechanical accessories, so that any single duct does not necessarily represent the position in pitch for which it is supposed to stand.

583 Q. 41. Do you know of what make these three differently arranged players were?

A. The Apollo player.

Q. 42. As I understand your description of what I may call the two irregularly arranged players, the first one has the ducts of the tracker-board in two parallel rows, alternate ducts being set in the opposite rows, so that any duct in either row is not in line transversely of the board with a duct in the other row, but, on the contrary, is opposite the interval between the consecutive ducts of the row; is that correct?

A. Yes.

Q. 43. And that in the second of these irregular instruments, the ducts are all in one row, but their order in the row is apparently arbitrary, having no relation to the chromatic order; is that correct?

A. Yes.

Q. 43*a*. Did you operate these different players with perforated rolls cut for them respectively?

A. I did.

Q. 44. Please state what pieces of music you played on them.

A. The pieces which on the rolls for the regular instrument were labeled "Little Cotton Dolly" and "Kentucky Babe."

Q. 45. Do I understand, then, that you had for the regular or chromatically arranged Apollo player the perforated rolls for the "Little Cotton Dolly" and "Kentucky Babe," and that you had also perforated rolls for each of the two irregular instruments, arranged to play those same two pieces of music on those irregular instruments respectively?

A. Yes.

Q. 46. From your examination of these instruments and use of them with their respective perforated rolls, what did you ob-

584 serve, first, with respect to the identity of the musical result; second, with respect to the similarity or dissimilarity of the different perforated rolls for the same piece of music, and what opinions or conclusions, if any, have you formed from this examination and comparison?

A. The musical result in each case appeared to be practically the same. As to a similarity of perforations in the rolls for either of these two compositions, there was absolutely none. I examined the rolls carefully in comparison with each other, and found them to be in appearance more diverse than so many distinctly different types of wall paper patterns. I also tried upon the other two instruments the roll which was cut for one of these three instruments, with the result of being able here and there to recognize a random group of notes, but in other respects found the reproduction to be absolutely idiotic and unintelligible. This would lead me to believe, as I have before stated, that these perforated rolls are in no sense intelligible

copies of a musical composition, but that they are simply a portion of the mechanical equipment which enables a performer to reproduce the sounds of a composition upon a given self-player, provided the perforations have been especially cut and prepared for that special instrument.

At the request of counsel for complainant, counsel for the defendant states that the two instruments referred to by the witness as irregular are not specimens of instruments on the market, but were specially made for different reasons—the one with the double row of ducts in the tracker-board having been made to illustrate and demonstrate the advantage of that arrangement in allowing margin for error in registration of the slot with the ducts, which may be due to irregular shrinking and contraction of the paper with changes
585 of atmospheric condition, and the other to illustrate the commercial advantage which might be obtained from having a player requiring perforated rolls, the order of whose slots, being arbitrary, would not be matched by any other manufacturer's product.

Q. 47. If you have the several perforated rolls which you have referred to for "Kentucky Babe" and "Little Cotton Dolly," which you operated and compared on the different instruments, please produce them.

A. The rolls which I used upon the regular Apollo of "Kentucky Babe" and "Little Cotton Dolly" are here, marked "Defendant's Exhibit Hughes Nos. 3 and 4." The roll for "Little Cotton Dolly," for the instrument having two rows of ducts in the tracker-board, I here produce. It is marked "XX2"; and the roll for the same instrument, for "Kentucky Babe," I here produced; it is marked "XX1." The roll for the instrument having the arbitrary arrangement of tracker ducts for "Little Cotton Dolly" is marked "O12," and the roll for that instrument for "Kentucky Babe" is marked "O-1."

The four rolls produced by the witness are offered in evidence and marked "Defendant's Exhibits Smith Nos. 1, 2, 3 and 4," respectively.

It is stipulated between counsel that the various instruments, players, etc., which have been referred to by the witnesses as used by them in connection with the perforated rolls in evidence on either side, may be considered as in evidence, and may be operated with perforated rolls at the hearing, if desired by either party.

No cross-examination.

Signature waived.

586 F. W. HEDGELAND, heretofore called as a witness in this case, recalled, testified as follows:

Q. 1. Do you know the gentleman who has been in attendance at the greater part of the testimony taken here during the past few days in this case, in consultation with Mr. Raegener, counsel for the complainant; if so, state who he is and what his business connection is?

A. I do know him. His name is E. S. Votey. He is connected with the Aeolian Company and is an officer of that company.

Q. 2. Is he the Votey whose name appears on the contract between the Aeolian Company and other parties, which is in evidence under stipulation in this suit?

A. I believe so.

Q. 3. Please state whether you had any conversation with Mr. Votey in which he stated anything in connection with this suit, if there was such.

Objected to as incompetent, irrelevant and immaterial to any issue.

A. I had a conversation with him last Saturday, the 16th instant. I told him I thought there had been a poor selection in the defendants in this suit. He stated, "We had a reason in selecting these parties." I understood him as applying "we" to the Aeolian Company.

Cross-examination by COMPLAINANT'S COUNSEL:

X Q. 4. You have attended all the sessions during which testimony for the defendants was given in Chicago and New York?

A. Yes.

X Q. 5. You represent the W. W. Kimball Company, and Mr. Evarts, here present, has been and is the counsel of your company?

A. No. Mr. Evarts is, I believe, watching the case for the Kimball Company. I have attended these sessions, as stated in
587 my previous testimony in Chicago, as I have interests that are jeopardized by this suit and contract.

X Q. 6. So that, as far as you know, the defendant, the Apollo Company, is represented by Mr. Burton; you are watching the suit because you have interests that are jeopardized; Mr. Evarts, counselor at law from Chicago, is here watching the case on behalf of the W. W. Kimball Company, and a few moments ago, Mr. Melville Clark, of Chicago, a piano-player manufacturer, also did some watching of this suit, for his own account. That is a fact, is it not?

A. I do not know exactly what interest Mr. Burton represents. I am not acquainted with Mr. Clark; in fact, have never met him, to my knowledge. Mr. Evarts is watching the case for the Kimball Company, as stated before. I am watching my own interests, as above stated. I am not aware what private conversations have taken place between counsel and client, but I am sure of one thing, that is, that if it was not for the existence of the contract which is stipulated in this suit, Mr. E. S. Votey would be represented on the defense of this suit, out of common and personal interest, but as it is now, it is apparent that his interests are all bound up in this suit and the numerous contracts which he wit*wit*nessed and signed for his company, the Aeolian Company, and signed them by E. S. Votey, director.

Signature waived.

W. J. HENDERSON, a witness called on behalf of the defendant, being first duly sworn, testified as follows:

Q. 1. Please state your name, age, residence and professional occupation?

A. W. J. Henderson; age, forty-seven; residence, 163 West 47th street, New York City; occupation, journalist.

588 Q. 2. Is there any particular department of journalism to which you have particularly devoted yourself or in which you are more engaged than any other; and, if so, please indicate it?

A. I have for twenty years been engaged in writing musical criticisms.

Q. 3. Will you please give, from the standpoint of a musician or musical critic, a definition of a musical composition?

A. A musical composition is an arrangement of musical tones in such an order that they create musical sense. It is very difficult to give a concise definition of a musical composition, but the succession of musical tones which does not show a definite design is not a composition.

Q. 4. Is the complete conception existent in the mind of the composer before he has given it, or before it has been given, audible expression, to be considered as the musical composition within the intent of your definition?

A. Yes, sir, if the composer completes the composition mentally before writing it or performing it he has performed the act of composing and has made a composition.

Q. 5. When to this musical composition fully and completely existent in the composer's mind, there is given by the voice or a suitable instrument audible expression, is such audible expression of the musical composition a copy of it?

A. No, sir. That is not a copy. When a person performs or sings a piece of music he doesn't sing or perform a copy of it; he sings or performs the piece itself.

Q. 6. When by such audible performance, vocally or instrumentally, the composer's musical ideas as embodied in such composition are conveyed to the mind of another person capable of re-

589 ceiving them fully, is the conception which such other person thus derives (assuming it to be perfect or as nearly so as possible) a copy of the musical composition which was first existent only in the mind of the composer?

A. No, sir, that is not a copy, because what that second person performs or sings is unquestionably the composition itself, no matter how he has acquired it; if he has it in his mind and can play it or sing it he has the composition.

Q. 7. If neither the audible reproduction, that is, the tones themselves in their proper succession and relation, or the complete reproduction of it as a conception in the mind of another person, constitutes a copy of the composition, what is a copy of a musical composition?

A. A copy of a musical composition is a written or printed record of it, in intelligible notation.

Q. 8. What is necessary to constitute an intelligible notation,

that is, what must the notation present or represent of the musical composition, in order to thus present it in copy?

A. It must show everything which will enable a person to perform it, or sing it (if it is a vocal piece) correctly. It must show the key in which the composition is written; it must show the time; it must show the length of each measure; it must show the pitch and duration of each note, and must have means of showing the occasional modifications of the normal durations of such notes. It must also contain directions for the proper variations in expression. I would like to explain that expression marks are not always in symbols, but sometimes in words.

Q. 9. I infer by your use of the word "symbols" in your last answer that you consider a system of musical notation as necessarily consisting of symbols for the various elements, such as pitch, duration, rhythmic formation, etc., which enter into and
590 make up a musical composition. Since the musical composition itself is directed to the hearing, or the mental sense corresponding thereto, and is apprehended or interpreted directly, to what sense must the symbols which make up musical notation be addressed?

A. I think I have already covered that point in a previous answer, when I used the word "visible." It must be addressed to the sense of sight.

Q. 10. Then would you consider the impression made on the roll of the graphophone by the stylus attached to the diaphragm, which is vibrated by the sounds produced in the presence of it, as constituting a copy of the musical composition, if it were such, the performance of which produced those vibrations and the impression in the wax, by virtue of the fact that by proper adjustment and manipulation it will give back to the ear an impression of those sounds?

A. No, sir, I don't consider that a copy of the composition, but simply a part of a mechanical method of performing it.

Q. 11. You are familiar to some extent, I assume, as everyone nowadays is, with the piano-players and other automatic musical instruments, which employ perforated sheets, commonly spoken of as perforated rolls, to control their action. How do you regard these perforated rolls as to their relation to the musical composition which they may assist in producing or performing by means of the proper instrument. Are they in any proper sense copies of a musical composition which may be performed by means of them?

A. No, sir, I regard those rolls in precisely the same light as I regard the graphophone records, which you have just mentioned.

Q. 12. They are, however, more definitely and clearly visible to the eye, and their physical features, for whatever they may
591 accomplish or whatever they may mean, are much more easily seen and analyzed than the configuration of the groove made by the stylus in the wax of the graphophone. Will you indicate, as far as your knowledge of these perforated rolls goes, in what respects they lack the requirements of an intelligible notation of a musical composition?

A. I have never been able to find anything in one of those perforated rolls which shows the key in which the composition is written,

the time signature (as musicians call it), the length or pitch of the notes or the limits of the measure.

Q. 13. Suppose that in a given instance, with respect to a particular perforated roll and examination, one could be furnished with a proper measuring instrument, having sub-divisions corresponding to the longitudinal lines of slots in the perforated roll and each marked to indicate the pitch to which each slot was intended to correspond, so that by laying it upon the roll transversely one might read on the measuring instrument against any slot which might be on the roll the name of the pitch or of the note which that slot was intended to produce when put on the instrument, and that one could, by the use of such a tool, go over the roll from slot to slot and ascertain and mark against each slot the pitch, would the fact that as to pitch the roll might be thus note by note deciphered, make it, in your judgment, an intelligible notation of the musical composition, or a copy, within your understanding of that word?

A. No, sir, it would not.

Q. 14. Suppose that it were by any means decipherable in such a step by step mathematical way as to the other features besides pitch, that is, that the rhythmic formation of the measures, etc., and the duration or relative durations of the notes could be
592 thus ascertained, it still remaining a fact that these things could not be read from the roll by eye, would the possibility of deciphering in all these respects render it a copy of a musical composition?

A. In my understanding, as a musician and a writer on music, it would not.

Q. 15. I designed to ask you at the opening, and I will ask you now, if you have not written and published some works upon music, and whether you will kindly give us some of their titles?

A. I have published six books on musical subjects: "The Story of Music," "Preludes and Studies," "How Music Developed," "What is Good Music," "The Orchestra and Orchestral Music" and "Richard Wagner."

Cross-examination by COMPLAINANT'S COUNSEL:

X Q. 16. I agree with you that a copy of a musical composition is as stated in your seventh answer, a "record of it," and as stated in your eighth answer, that the record of "it must show everything which will enable a person to perform it." Do you agree with me that a written or printed record is but one form of record, and that various forms of intelligible records of musical compositions are conceivable?

A. I agree with you insofar as I understand you, which is, that it is possible to conceive of other systems of notation than the one in general use.

X Q. 17. In other words, other "records" than those containing the usual form of notation are conceivable?

A. Yes, sir.

X Q. 18. If a person has not heard a musical composition, some vehicle or record is necessary in order that his mind may get that musical composition. That is a fact?

A. Yes, sir.

593 X Q. 19. Suppose by means of dies I would cut notes into paper in the form of the usual staff notation, would that be "an intelligible notation" to a musician?

A. In the form of the usual staff notation, certainly.

X Q. 20. Then it is not strictly necessary, as stated by you, that the copy of a musical composition, in order to be intelligible, must be written or printed?

A. No, sir, it could be photographed, or painted, or lithographed, or engraved, or, as you say, cut with a die, so long as it carried out the condition that you name—to embody the music in the regular staff notation.

X Q. 21. Then when you gave a definition of what constitutes a copy of a musical composition, you wish to qualify it by stating that the record must necessarily be in the form of the "regular notation?"

A. I wish to qualify it, so far as this: That the regular notation is the notation known and understood by musicians all over the world. I do not wish to exclude what I have before said, that it is conceivable that other systems of notation could be invented.

X Q. 22. There are perfect and imperfect copies of musical compositions; that is a fact, is it not?

A. Yes, sir.

X Q. 23. Why must the symbols which make up a musical notation be addressed to the eye; can't blind people render a musical composition from records made specially for them and intelligible to them?

A. Yes, sir. I was of course not thinking of the exceptional case at the time.

X Q. 24. I believe the defendant in this case likewise did not think of the exceptional cases, to wit, that perforated rolls were new records, by means of which musical compositions become intelligible. Is it not a fact that "staff notation" is one of the tools by means of which a musical composition becomes intelligible?

594 A. I don't know that I would be prepared to call it a tool any more than I would call a printed copy of Shakespeare's plays a tool.

X Q. 25. Well, if the word "tools" does not suit you, suppose we agree on the term "means," and then I take it that you will admit that "staff notation" is one of the means through which a composition becomes intelligible, just as a printed record of one of Shakespeare's plays?

A. If we are not at cross-purposes on the meaning of the word "intelligible," I agree with you, of course. I think I know what you mean, though, by the word "intelligible."

X Q. 26. Without "staff notation" I take it, that, according to your definition, a musical composition is unintelligible? I mean the record of the musical composition.

A. The trouble is that that is the only thing that I know as a record.

X Q. 27. Suppose a great musician, like Paderewski, makes a record of an improvisation by means of an apparatus which makes

perforations similar to the perforation in the rolls before him, and there is no other record of his composition, would the fact that such perforated records were used in the Apollo or other self-player make it any less a "record" of that musical composition, even though such roll would at the same time be a part of the instrument?

A. It would not, if there were no other records of that composition. It would make no difference in what way it might be put down if it could be deciphered and reproduced, even if it were recorded in Egyptian hieroglyphics. Several attempts have been made to invent systems of musical shorthand, for the purpose of recording improvisations—none of them has been successful, but if any one had—music improvised could have been recorded
595 that way, and afterwards written out in staff notation, just as a stenographer writes out his notes. Of course that writing out in staff notation would be for the purposes of general publication.

X Q. 28. To make a written copy of a musical composition you need as your tools pen and ink, and to make a printed copy tools in the shape of a printing press are required; that is a fact, is it not?

A. Certainly.

X Q. 29. Is a stenographic copy of a book a copy of the book?

A. That is a question which I am hardly prepared to answer. It seems that goes into technicalities which I am not prepared to answer. What I mean is that a copy of a book is what you go and buy. At the same time I suppose it might be possible that if I sat down and copied out one of those printed books, it might be said that I had made a copy of it.

Redirect examination by DEFENDANT'S COUNSEL:

R. D. Q. 30. In your use of the word "visible" in answer to Q. 9 and your statement in that answer that the symbols to make up a system of musical notation must be addressed to the sense of sight, do you find or consider that there is any inconsistency with your reference in answer to one of the questions on cross-examination with respect to the way a blind man sees with his fingers, or would you in any way qualify phraseology of your answer to Q. 9 in order to properly include that means of apprehending symbols?

A. There is an apparent inconsistency in the language, but the means of reading provided for the blind man consist simply in raising up the printed letters or notes, so that they can be felt, instead of seen. Their character is in no other respect changed.
596 What one man sees another man feels, and the mental impression is the same in both instances.

R. D. Q. 31. And that impression is an impression in form or outline of the characters printed or embossed?

A. Yes, sir.

Signature waived.

NEW YORK, *May* 21, 1903.

Taking of testimony resumed.
Present: Counsel as before.

FREDERICK HOPKINS, a witness called on behalf of the defendant, being first duly sworn, testified as follows:

Q. 1. Please state your name, age, residence and occupation.
A. Frederick Hopkins; age, forty-two; residence, Schenectady; chief arranger of the Perforated Music Roll Company at Schenectady and New York.
Q. 2. Please state what has been your musical instruction and training, and work in musical lines apart from your occupation as arranger.
A. I studied violin and viola with William Schultze and Emil Mollenhauer, singing with M. H. Allen, George L. Osgood and Augusto Rotoli. I sang and played professionally and taught singing and violin for many years. Studied musical composition at Harvard College under John K. Paine, and have published occasional compositions of my own.
Q. 3. Do you find that in your present work as arranger for perforated music rolls the musical knowledge which you have and the ability which you have acquired are necessary and utilized?
A. I do. Musical knowledge and training are necessary to a good arranger.
Q. 4. Will you please state in outline the method which you follow in your present work?
597 A. In my present work I try to reproduce by means of perforations on the music sheet so far as possible the effect of the musical composition as it would be if played by a competent performer. The mechanical method I employ is practically a drawing board, T-square, right angle and rule or scale, all of which, however, are practically combined in a marking cable which minimizes the mechanical labor. With this I indicate in pencil on the music sheet the places for perforations. Those perforations are subsequently made by machinery, and with that sheet as a stencil or master, as many copies as desired are struck off by our perforating machine.
Q. 5. Is your original lay-out or diagram, which when it is cut by the first machine you mentioned becomes the stencil or master, on a larger scale or on the same scale as the perforated rolls which are cut from it for use on the self-player?
A. Exactly the same scale, so that it is a *fac simile* of the commercial rolls.
Q. 6. What is the commercial perforated roll, as you consider it from your standpoint?
A. From my standpoint, the perforated roll used in mechanical piano-players consists of the original musical composition, as viewed through three media—(1) that of the musician who interprets the composition, (2) that of the pianist, who regards it with a view to the limitations and possibilities of the piano, and (3) that of the

performer on a mechanical player, who considers the limitations and possibilities of the player. To go into it a little more in detail, the beginning of the perforation represents the putting down of the fingers upon the keys; the end of the perforation represents the lifting of the fingers. These two acts must be cut into the perforated roll, so that so far as that act is essential, I must treat the
598 composition from those three standpoints, of the musician, pianist and the player upon mechanical instruments.

Q. 7. As I understand you, then, it is the aim of the arranger for the perforated roll to cause the roll which he makes, to reproduce when used on the automatic player the *performance* of the musical composition, as distinguished from the ideal conception of the composition, if the two are not identical; that is, to make the music sound as nearly as possible as it would sound if played by hand, even though, by reason of the limitations of the human hand and the piano, the exact production of it as written would be impossible by hand on the piano?

A. Yes. Of course, any good composer for the piano considers the limitations of the instrument and of the player, but does not change his notation for all that. However, as a rule, music should be performed not as it is written, necessarily, but as it should sound when played by a competent performer.

Q. 8. From your experience in laying out or arranging the perforated rolls, working upon the identical scale of the rolls as they are finally produced for sale, are you able to read the rolls to the extent of being able to tell the pitch of the notes to which the slots in the rolls correspond, by eye?

A. By no means. I can guess at it, within perhaps half a tone or a tone, or I might hit it right; but, as there are sixty-five holes with nothing to distinguish them one from the other except with respect to their distance from either end, and nothing further to identify them one from the other, I doubt if any degree of experience or musical knowledge could enable one to more than approximate the pitch.

Q. 9. How is it with regard to the duration of the several notes? Can that be judged with sufficient certainty or accuracy to
599 give one that element of the musical composition by eye from the perforated rolls?

A. In a large number of cases, the rhythmical divisions can be approximated by a glance at the whole row or a portion of it; but not invariably, and never certainly determined. The length of a note in the perforated rolls by no means represents the length of that note in the notation on the sheet music, for very many reasons. For instance, the phrasing of the composition often and almost always demands that a note be given either a little less or a little more than its indicated length, and, as I said before, the note must be touched as it should sound, and not as it is written. Then, again, legato or staccato effects are of course made solely by the perforations. To produce a good cantabile, such as a phrase may demand, the notes overlap, taking up more space than mathematically they would be entitled to in the original notation, and that overlapping may be

more or less according to the degree of legato and according to the speed with which the motor of the mechanical player is expected to move. Again, staccato notes may be more or less staccato, that is, of varying degrees of length, all different from the length indicated in the original notation. Again, the composition may call upon the player to move suddenly with hands from one position to another on the piano keyboard. Thus, leaving a note before its full indicated length has been attained; this should be indicated in the cutting. Further examples are chords which the hands cannot reach at once and which must be played arpeggio, notes at the end of a run, which must be slightly prolonged in order to avoid an effect of jerkiness; rapid notes in the same harmony, which may be prolonged for a harp or loud pedal effect, and many other instances which I could name.

600 Q. 10. In speaking of the "note" of the perforated roll, you refer to the slot which represents the note of the written score?

A. I mean the hole or perforation made.

Q. 11. All these requirements of good cutting to make good perforated rolls go to prevent the length of the slots from indicating or corresponding reliably to the indicated length of the notes on the ordinary staff notation, I understand?

A. Yes; as I may have said, the better the cutting the less apt is it to correspond exactly to the original notation.

Q. 12. Then the more perfectly the perforated roll performs its function as a piece of the mechanism of the self-player, the farther away it is from performing the function of a readable score of the musical composition. Is that correct?

A. That is true. It indicates interpretation, which the original score is unable to fully do.

Q. 13. And when the length of a given slot is determined by and, so to speak, embodies considerations of the properly indicated length of the note in the score, the indicated or unindicated character of the note or of the phrase, as legato or staccato, and at the same time the limitations of the piano and the player's hand, such as the fact that it takes time for the hand to move from one part of the keyboard to another, and also limitations of the mechanical player and paper themselves, such as that a bridge must be left between slots, even though the tones which they are to produce should meet; is there anything in the slot itself, determined by all these considerations, by which one attempting to read the perforated roll by eye could sift them out and tell what of the length of the slot was due to the indicated length of the note in the score, what was due to the
601 phraseological relation of the note to the preceding and succeeding notes, and what was due to the limitations of the piano and the human hand, and what to the limitations of the automatic player and the paper?

A. There would be absolutely nothing in the slot itself to determine these points. A few of them might be settled by the rhythm of the composition, or by measuring between other ascertained points, but in general my answer to your question is no.

Cross-examination by COMPLAINANT'S COUNSEL:

X Q. 14. It may frequently be the case that a perforated roll arrangement will enable the composition to be interpreted more correctly than would be possible on the piano from a printed piano score by the average player?

A. Yes, but I would like to qualify my "Yes" by saying that a good composer will consider the limitations of his instrument and his performer. And those limitations must be understood and taken into account in determining what the performance of that composition should be. So that, although in performance the composition may differ in some detail from the original notation on paper, yet the performance will be right.

X Q. 15. So that, although the perforated roll arrangement differs in many respects from the author's original arrangement for the piano, nevertheless the performance of that musical composition on either the piano or on the self-player would be substantially the same performance of the same musical composition?

A. The performance, with the aid of the self-player, should, with a properly perforated roll be substantially the same performance intended by the composer when he wrote his music down in his own notation, but with the reasonable scope for freedom in interpretation by a competent musician, and with the necessary but
602 often musically unjustifiable changes occasioned by the limitations of the mechanical player.

X Q. 16. Do you believe that competent musicians could after, say, six months' trial and experience, be able to read and play, say, the mandolin, from perforated rolls presented to them and the music of which they were unfamiliar with?

A. The mandolin seldom is used to give a performance that is musically very correct, so that the standard of mandolin performance is musically low. Yet, bearing that in mind, I do not think that even on the mandolin one could learn to read from the perforated roll in six months, or any longer time, unless something were added to the perforated rolls, like a division into measures and the lines of the staff or something of that nature.

X Q. 17. How does it happen that more perforated rolls are cut for one composition than for another?

A. The same element of popularity must enter here as in the case of all music. Yet I think a very important factor in perforated rolls is this: They are bought largely and used by people with some love for music who have been in the habit of listening to music. Those persons have favorites among the compositions they hear at concerts, like, for instance, Mendelssohn's Rondo Capricioso. Those pieces which they have heard and set up as a standard of good music, they want to hear and to play themselves, and those are the ones they buy outside of the merely popular class of compositions.

X Q. 18. There are, however, cases such as hymn tunes, and many others, in which exact reproductions of the original score of the composer can be produced by means of perforated rolls?

A. Undoubtedly, in such cases, by means of simple measure-

ments, we could reproduce a simple choral composition in its original notation.

603 Redirect examination by DEFENDANT'S COUNSEL:

R. D. Q. 19. In the supposed case referred to by your last answer, in which the character of the musical composition was such that no variations from the indicated length of the notes would be necessary or desirable in cutting the slots in the roll for it, and the rhythmic formation was so simple and definitely marked as to be discoverable from the roll, the method of reproducing the original notation from such roll would still have to be by measurement with the proper graduated instrument and not by mere inspection by eye?

A. Yes, that is true.

R. D. Q. 20. In your answer to X Q. 14 you understand the word "interpretation" contained in that question as referring to the interpretation put by the arranger of the perforated roll upon the musical composition?

A. I did not understand the word "interpreted" in that question to refer to the reproduction by perforations on a music roll. I took it to refer to the performance on a mechanical player when the music had been once perforated.

R. D. Q. 21. Then you understood the word "interpreted" as substantially equivalent to the word "produced" or "performed."

A. Yes, I understood it as "performed."

Signature waived.

ARTHUR CONROW, a witness called in behalf of the defendant, being first duly sworn, testified as follows:

Q. 1. What is your name, age, residence and occupation?

A. Arthur Conrow; age, twenty-eight; residence, New York City; occupation, superintendent of the Auto Music Perforating Company.

604 Q. 2. Where is the Auto Music Publishing Company located?

A. We have two factories, one at Nos. 227-231 Bleecker street and one at 584 Hudson street, both in New York City.

Q. 3. At which one of the factories are you employed?

A. I have charge of both of them.

Q. 4. What does the company manufacture?

A. Perforated music rolls.

Q. 5. How long have you been with them?

A. Ever since that company started—nearly three years.

Q. 6. You may state, if you know, whether your company receives requests from composers of music and publishers of music to have their pieces cut by your company?

A. We receive such requests very frequently, both from composers and publishers.

Q. 7. For what purpose are these requests made?

A. Presumably for the advertising which they receive from having their arrangements catalogued.

Q. 8. How are these requests made, in writing, or orally, or both?
A. Made both ways—some orally and some written.

Cross-examination by COMPLAINANT'S COUNSEL:

X Q. 9. How does your company advertise and catalogue these rolls as music?
A. We do neither; we print no catalogues. The manufacturer to whom we sell the music prints the catalogues.

Redirect examination by COMPLAINANT'S COUNSEL:

R. D. Q. 10. Will you give the names of any music publishers or composers that you recall from whom your company has received such requests or applications to have their publications or compositions cut for self-players.
605
A. I can give you about four or five offhand: Mr. John Francis Gilder, Mr. Doda, of New York; Florence Wood, C. R. Cressey.
R. D. Q. 11. As I understand you, these requests are substantially offers, as well as requests; that is, they were not applications to have you pay for the privilege of cutting the compositions?
A. They simply asked us to arrange their pieces for such piano-players as we cut music for, without asking any royalty or pay of any kind.

Recross examination:

R. X Q. 12. For what self-players do you cut music?
A. The Cecilian, the Lyraphone, the Paragon and one or two others which are not on the market.
R. X Q. 13. Is all this music cut by your company intended solely for piano self-players?
A. Yes.
R. X Q. 14. Do the rolls of music which you cut fit interchangeably each of the instruments mentioned by you?
A. No, sir.
R. X Q. 15. Can some of them be interchangeably used?
A. No, sir.
R. X Q. 16. Then do you make a separate arrangement for each player, using different stencils in each case?
A. No, we do not. The same master sheet may be used for all of them, except in the case of the Paragon, which is a fifty-eight note player, and requires a separate master sheet.
R. X Q. 17. Then having the same master sheet, what
606 differences are there in the perforated rolls made therefrom for the different instruments?
A. They have different clutch pins, which rewind the roll, and are placed on different ends of the spool.
R. X Q. 18. Who makes these arrangements for you, skilled musicians?
A. Skilled musicians, yes.
R. X Q. 19. Is it not a fact that your company has recently offered to pay royalty to publishers of sheet music for the exclusive privilege of cutting music from copyrighted musical compositions?

A. No, sir, it is not.

R. X Q. 20. Did your company not send out printed contracts to publishers of music containing clauses giving your company the privilege of cutting copyrighted music in consideration of your company paying royalty?

A. Our contracts, which we did send out, asked for a privilege, not the exclusive privilege, and for this we were willing to pay a royalty if the suit which was then pending between music publishers and the manufacturer of perforated music rolls was decided in favor of the publishers, or if a law should be passed bringing perforated music inside the copyright laws.

R. X Q. 21. These proposed contracts of yours were sent broadcast through the country, were they not?

A. They were sent to the publishers throughout the country, except those who we knew had already signed the exclusive contracts of the Aeolian Company.

R. X Q. 22. And these contracts provided, among other things, that if the present suit should be decided in favor of the complainant, that in that case your company proposed to pay royalty to the owners of copyrights of musical compositions for the privilege of cutting, publishing and vending perforated reproductions of such copyrighted musical compositions?

607 A. We agreed to pay them a royalty for the use of their copyrighted music, for piano-players.

R. X Q. 23. About how many perforated music rolls has your company published and sold to date?

A. It is a pretty good business. I don't feel called upon to give the number.

R. X Q. 24. Well, I suppose, you have cut perforated rolls for many thousand different musical compositions. That is a fact?

A. Our catalogue numbers about 1,600. By that I mean the catalogues of our customers, which said catalogues give the titles of the various musical compositions for which we have cut rolls.

Signature waived.

JAMES S. HOLMES, JR., a witness called on behalf of the defendant, being first duly sworn, testified as follows:

Q. 1. What is your name, age, residence and occupation?

A. James S. Holmes, Jr.; age, thirty-seven; residence, Orange, New Jersey; occupation or business, general manager of the Perforated Music Roll Company.

Q. 2. What is the business of that company?

A. Manufacturing perforated rolls for the various piano and other automatic players.

Q. 3. In the course of that business have you had an opportunity to learn whether composers and publishers of sheet music regard the cutting of perforated rolls for producing their music by means of the automatic players as a benefit or the reverse to their interests in the publishing and sale of their own form of those publications?

A. I have.

608 Q. 4. What is their view upon this point as indicated in their dealings with you, and what evidence have you of it?

A. From the correspondence which my company has received from the publishers of music, I am led to believe that the majority of them look upon the perforating of rolls favorably.

Q. 5. If you have any correspondence upon which you can base this conclusion, you may produce it and state what it is.

A. At various dates from April 15, 1903, on, we sent to music publishers throughout the country a letter as follows:

"GENTLEMEN: Please mail us at once a list of your publications. We are now producing many thousands of perforated rolls weekly. In the past we have perforated from other perforated music. We, however, are not fully satisfied, as the originals are apparently incorrect musically, and we will therefore in the future arrange to perforate from the score. If you will forward us a list of your publications, with your best trade discount, we will undoubtedly be able to order of you to considerable extent.

"Thanking you in advance for the favor, we remain,

"Very truly yours, P. M. R. CO."

We received replies, which I have here in large number.

The letters produced by the witness are offered in evidence, marked "Defendant's Exhibits P. M. R. Co. Correspondence," the sheets being numbered from 1 to 40, inclusive, and initialed by Mr. Raegener. It is stipulated that the original correspondence may be left in the hands of the witness, subject to being produced at the hearing if called upon by either party, and that compared copies may be made a part of the record.

609 Copy of said correspondence is as follows:

261 WABASH AVE.,
CHICAGO, ——— 25, 1903.

The Perforated Music Roll Co., N. Y.

GENTLEMEN: We have in our catalogue some very valuable and popular standard selling pieces of music, not the rag-time two-step vaudeville trash, but standard sellers; but having a contract with the Aeolian Company, we are not in a position to do anything at present. You probably know more about the suit pending than we can tell you. The Aeolian Company no doubt have contracts with most of the other principal publishers. We understand they have with *all*, having apparently cornered the market, and until things are decided we hardly know where we are at, but unless we get something out of it soon we will take the matter up and find out.

Yours very sincerely,

P. P. G. CHICAGO MUSIC COMPANY.
P. P. GIBBS, *Prop'r.*

3439 MARSHALL STREET.
PHILADELPHIA, *May 2nd*, 1903.

The Perforated Music Roll Co., New York City.

DEAR SIRS: In compliance with your request of April 30th, we enclose herewith catalogue containing list of our publications. We beg to state, however, that we have made a contract with the Aeolian Co. to control our publications. Thanking you for your inquiry, we beg to remain

Very truly yours, EDW. A. MEYER & CO.

610 CINCINNATI, O., 5, 18, 1903.

James S. Holmes, Jr., c/o The Perforated Music Roll Co., 10 West 23rd St., New York City.

DEAR SIR: In reply to your letter requesting catalogue of my publications, will say—I have given the Aeolian Co. the right to use my publications, and am therefore unable to help you out. I am

Yours truly, PHILIP KUSSEL.

165 TREMONT STREET.
BOSTON, MASS., *April* 25, 1903.

Perforated Music Roll Co., New York, N. Y., J. S. Holmes, Manager.

DEAR SIR: In answer to yours of the 23rd will say that we have signed a contract with the Aeolian Company giving them the exclusive rights to cut our copyrights so we are bound by that contract not to allow any other firm to cut our music; otherwise we should be pleased to have you use them.

Yours respectfully, H. F. ODELL & CO.

Dictated to E. M. H.

(*Postal Card.*)

195 WABASH AVENUE.
CHICAGO, *Apr.* 23/1903.

The Perforated Music Roll Co., #10 W. 23rd St., New York City, N. Y.

GENTLEMEN: Replying to your request for our catalogue will say that we have granted exclusive right to the Aeolian Co. to cut our music but anything they fail to cut within one year after a request from us to cut it we are at liberty to offer to you.

Very truly, THE ALBRIGHT MUSIC CO.

611 310 EAST 19 ST.,
NEW YORK, *Apr.* 30, 1903.

Perforated Music Co., James S. Holmes, Jr., G. M., 10 West 23rd St.:

Your favor of April 27/03 at hand and in reply we will say that our discount is on Orchestral Music 50% and Sheet Music 75%.

Very truly yours, H. ROEDER.

CLEVELAND, O., *May* 4, 1903.

Mr. James S. Holmes, Jr., Mg.

DEAR SIR: Your favor of recent date received and herewith send you list of our publications. We have only one price to dealers for our sheet music which is 7½ cts. per copy, terms 30 days, or we prepay express or postage if remittance- are sent with order.

Yours truly, THE SMITH & WHITE CO.

(*Postal Card.*)

BOSTON, MASS., *Apr.* 24, 1903.

Perforated Music Roll Co., 10 West 23rd St., New York City, N. Y.

GENTLEMEN: By this mail we send you our catalogue. Discount in quantities, on Band and Orchestra music 50%.

Yours very truly, CUNDY MUSIC CO.

1231 POPLAR STR.,
OAKLAND, CAL., *April* 27-03.

The Perforated Music Roll Co., New York.

GENTLEMEN: In compliance with your favor of April 17
612 I enclose my complete catalogue. Best Trade discount is 75% off net. New issues 80% off net.

Yours truly, S. SEILER.

4737 PRAIRIE AVE., CHICAGO.

Perforated Music Roll Co.

GENTLEMEN: In reply to your letter dated April 25th addressed to New York and forwarded to me here, where I am now located. I have sent you by mail under separate cover, my catalogue of music, and quote you a rate of ½ & ½ net.

Will be pleased to supply you with whatever you may order, promptly.

Have a new march in press that appears like a "big one"—at least the dealers and jobbers here seem to think so.

Hoping to hear from you soon I am

Very truly yours, GEO. L. SPALDING.

NOS. 6, 8, AND 10 FOURTH AVE., COOPER SQ.,
NEW YORK, *April* 30, 1903.

The Perforated Music Roll Co., New York City.

GENTLEMEN: In accordance with your request of the 29th inst. I have mailed under separate cover complete catalogue of music embracing the latest editions and shall be pleased to book your valued orders for anything you may require in my line, inasmuch as I am supplying the Companies manufacturing records etc.

The net catalogue prices are subject to a general wholesale discount of 40%, but on extensive purchases, I will give you the benefit

of an additional discount, and anticipating the pleasure of
613 booking your frequent valued orders, I beg to remain,
Yours respectfully, C. FISCHER.

DAVENPORT, IA., 4/27/1903.

Mr. James S. Holmes, Jr.

DEAR SIR: Yours to hand, and have sent catalogue under separate cover. Anything you want, will be pleased to send you gratis. Jolly Corks, Rag Time Jimmie, Press Club, In a Den, Nanette Waltzes, are all favorites.

Hoping to hear from you again, and wishing you the best of success, I remain,
Respectfully, L. B. GRABBE.

1123 BROADWAY,
NEW YORK, *April 30th*, 1903.

The Perforated Music Roll Co., 10 West 23rd Street, New York City.

GENTLEMEN: I enclose herewith a little list of some of my latest pieces and if you want to send in an order, I will — same at 75% from marked price.
Yours etc., R. A. SAALFIELD.

35 WEST 21ST STREET,
NEW YORK, *April* 30, 1903.

The Perforated Music Roll Co., 10 West 23rd Street, New York City.

GENTLEMEN: Replying to your esteemed favor of April 29th, I mail you herewith a list of a few of my publications; and I
614 am also sending you under separate cover, copies of some of my most popular pieces. Every one of these has had a large sale, and will be immediately recognized by those who hear them. Though they are for the most part tunes written to sacred words, yet they have a swing to them which puts them in the category of popular melodies.

I have about half a dozen compositions in manuscript which have never been published. Could I make some arrangement with you to use those?

Hoping to be able to do some business with you, I remain,
Yours truly, W. L. MASON.

P. S.—I have marked in the pamphlets sent you the most taking pieces.

BALTIMORE, MD., *April 28th*, 1903.

The Perforated Music Roll Company, New York, N. Y.

DEAR SIRS: Your letter to hand, and contents carefully noted. As per your request, we herewith give you a list of our latest issues:

A Child to its Dead Mother's Vision.
A Lover's Murmur.
Come Oh! Come Back to Me.
Dear Old Dad.
Don Day.

Echoes of a Million Hearts.
False Letters.
Give a Hand Where tis Needed.
How the Maine Went Down.
I Love You Fondly, Mary Dear.
In the Gloaming with my Sweetheart by my Side.
I Want to See my Mother.
I Wonder if She'll Care for me Then.
615 Just like a Broken Toy.
Mother.
My Bluegrass Queen.
My Geraldine.
My Heart's the Same in Poverty as Wealth.
Only an Hour of Bliss.
Sambo's Dream.
Some Day.
The Girl I Wooed and Won.
The Last Good-Bye.
The Spirit of the Star.
Were you Ever.
What a Daisy told Annabelle.
When the Bloom is on the Clover, Nancy Dear.

If you only desire copies to work from, we shall be pleased to furnish you professional copies of any, or all, of the foregoing free of charge.

Hoping to hear from you soon again, and wishing you every success, we beg to remain, Dear Sirs,

Yours, to command,

THE HOWARD PUB. CO.,
Baltimore, Md.

P. S.—Can you use any of our price-lists?

THE BELL MUSIC COMPANY.
34 EAST 14TH ST. NEW YORK, *Apr.* 29 '03.

Perforated Music Roll Co., 10 West 23rd St., N. Y.

GENTLEMEN: Replying to yours of 28th inst. we herewith enclose you our special to dealers, and will offer the same terms to you. Hoping to be favored with an early order from you we are

Very truly yours,

THE B. M. CO.,
Per R. M. TANNER, *Mg'r.*

616 TRENTON, N. J., *Ap'l* 29 '03.

DEAR SIRS: I herewith enclose catalogue as requested with trade prices marked.

Soliciting your early order, I remain

Very truly yours G. S. STANNARD.

The Perforated Music Roll Co., New York.

26-28-30 O'Farrell Street,
San Francisco, *Apr.* 23, 1903.

Perforated Music Roll Co., New York, N. Y.

Gentlemen: We have mailed you under another cover three pieces of music we have published, as per your request of April 17th. This is all we have gotten out as yet and hope you can make use of them.

There will be no charge made for same.

Yours truly,
JOHN P. BRODER,
M.

56 Fifth Avenue, Chicago, 4/23/03.

Perforated Music Roll Co., James S. Holmes, 10 West 23rd St., New York City, N. Y.

Gentlemen: Replying to your letter of the 21st, we enclose you herewith our Price-List of our publications and on pages 10 to 19 inclusive you will find list of our sheet music. We will allow
617 you a 50% and 25% on 1 to 12 copies of our sheet music. On 25 copies and upward, half and half (50% and 50%).

Trusting to receive your orders, we remain

Respectfully yours
BILHORN BROS.,
Per P. P. B.

10 N. Charles Street.
Baltimore, *April* 24, 1903.

The Perforated Music Roll Co., New York, N. Y.

Gentlemen: Your letter of the 23rd at hand and replying to same would say we have sent you under separate cover our complete Catalogue and shall be pleased to quote you a discount 2/3 on any sheet music contained in same. Trusting that we may receive a share of your esteemed favors, we are,

Yours truly,
GEO. WILLIG & CO.

Dict. by O. C. Z.

175 Tremont St.,
Boston, Mass., *April* 24, 1903.

Perforated Music Roll Co.

Messrs.: We send you our list of publications today. If you are able to use any of our music we will allow you ⅔ off list price.

Yours truly
ALFRED CHENET & CO.

218 Tremont Street.
Boston, Mass., *April* 2d*th*, 1903.

The Perforated Music Roll Co.

Gents: We have sent you as per your request our catalogue & Thematic list under separate cover. We will make you a rate
618 on our copyright @ 75 off from list price.

Yours truly
EVANS MUSIC CO.,
N. A. C.

CINCINNATI, O., *May* 2, 1903.

Perforated Music Roll Co., Mr. James S. Holmes, Gen'l M'g'r, 10 W. 23rd Ave., New York.

DEAR SIR: Your letter of the 30th at hand and we are sending you by this mail complimentary copies of our own publications.

Trusting that you will make good use of same, we remain,

Respectfully yours

ILSEN & CO.,
Per W. J. C.

1025—N. GRAND AVE.,
ST. LOUIS, *May 1st*, 1903.

The Perforated Music Roll Co., New York City.

GENTLEMEN: Yours of April 28th received. As per your request I send you to-day a selection of the best in my catalog. Every single one of them will make splendid numbers for perforated music rolls. Kindly advise me what you will do with them.

The package (containing about 10-12 pieces) sent to-day per express.

Very truly, LOUIS RETTER.

619

40 BIBLE HOUSE,
NEW YORK, *April 30th*, 1903.

Perforated Music Roll Co., 10 West 23rd St., City.

GENTLEMEN: We have your letter of the 29th inst., and in reply to your request we are sending to you today under separate cover a copy of our regular catalogue, and will be glad to furnish for you anything in the way of sheet music at a discount of ½ and ¾ from the retail price.

This is a larger concession than we usually make to dealers, but if your manner of handling our goods will furnish some advertising, we may be of mutual benefit to each other.

We called upon you this morning and were pleased with the courtesy extended to us.

Truly yours,

THE FILLMORE BROS. CO.,
By C. W. WORTH, *Eastern Agent.*

111 EAST *East* 14TH STREET,
NEW YORK, *May 2nd*, '03.

GENTLEMEN: Yours of Apr. 29th. to hand. Enclosed you will find one of our lists, with some of our late publications added in red ink.

Our best trade discounts are ½ & ½ off list prices.

Hoping to be favored with an order, we beg to remain,

Yours respectfully, THE LYCEUM PUB. CO.,
=111 *E. 14th St.*

1118 Olive Street.
Saint Louis, *May* 1, 1903.

Perforated Music Roll Co., New York City.

Gentlemen: Replying to yours of April 28th, beg to state that we have mailed to you under separate cover our catalogue of
620 musical publications upon which we will be pleased to allow you a discount of 66⅔%.

Thanking you for your inquiry and awaiting your further commands we are,

Yours respectfully

THIEBES-STIERLIN MUSIC CO.

404 River Street.
Troy, N. Y. *May 1st*, 1903.

Perforated Music Roll Co., New York City.

Gentlemen: Replying to yours of the 29th ult., we herewith give you a list of our publications:—

Vocal.

*Forever—in 2 keys—.....Koninsky
*I Am Lonely Here, Without You, Nellie Dear.....Koninsky
I Didn't Think You Cared to Have Me Back.....Koninsky
I Wants a Man Who Ain't Afraid to Work.....Koninsky
May, Sweet May.....Trevelyan
Sing Me a Song of Other Days.....Koninsky
*When Mamma Puts the Little Coons to Bed.....Koninsky
When I Return We'll Be Wed.....Koninsky
*You Alone.....Koninsky
Ev'rything A-Comin Mah Way.....Moulton

Instrumental.

*Beneath the Starry Flag, march.....Hartman
Dance of the Nymphs—characteristic.....Koninsky
*Dancing in the Moonlight.—characteristic.....Koninsky
*Evening Thoughts—reverie.....Bayley
Fleur de Lis—waltzes.....Browne
In a Japanese Tea-House—waltzes.....Koninsky
621 *The Return of the Troops—march.....Hartman
*The Grasshoppers' Hop.....Koninsky
*The Academy Girl—two-step.....Noelte
The Little Kinkies—two-step.....Koninsky
*Moonlight on the Lake—reverie.....Bayley

With the exception of "Fleur de Lis" which is 60c., all are marked 50c., and a number of them are very popular, particularly those marked with an *. Our best trade discounts are $10.00 per hundred, or 12½c. per copy in small lots on all except "Evening Thoughts" and "Moonlight on the Lake." These are $12.50 per hundred, or 13½c. in small lots Assorted if desired. Hoping to be favored with your orders, we are,

Resp't yours,

EDW. M. KONINSKY and BROS.

48 West 29th St., New York, *May* 5, 1903.

Mr. Jas. S. Holms, Perforated Music Roll Co., 10 West 23rd St., City.

Dear Sir: Replying to yours of the 24th ult. we beg to enclose herewith our catalogue also circular letter, describing our new issues and the special inducements to customers who subscribe for these new issues.

With best wishes and hoping to be favored with large orders from you, I remain, dear sir,

Very truly yours, F. A. MILLS.

34 East 21st Street, Near Broadway,
New York, *April* 27, 1903.

The Perforated Music Roll Co., 100 West 23rd St., City.

Gentlemen: We are in receipt of your valued letter of
622 the 25th and will cause our catalogue to be sent forward to you under separate cover, allowing you a $\frac{1}{2}$ and a $\frac{1}{4}$ from the price quoted therein.

Hoping to hear from you, beg leave to remain,

Very truly yours, JOS. W. STERN & CO.

244 Sixth Avenue,
New York, *April* 27, 1903.

Mr. James S. Holmes, Jr.

Dear Sir: Yours received. We beg to say that the lowest discount for trade on our publication is $\frac{1}{2}$ 3/0 off. We will be pleased to hear from you at any time.

Yours very truly, TIPALDI BROS.

18 East 116th Street,
New York, *April* 27, '03.

James S. Holmes, Jr., 10 West 23rd St.

Dear Sir: Per request I enclose list of Best selling publications on which I will quote you rates of half and half. Trusting I may hear from you largely in the future I am

Yours truly, JAS. D. SHIPMAN,
18 E. 116th St., New York City.

9 East 17th Street,
New York, *April 27th*, 1903.

Mr. James S. Holmes, Jr., c/o Perforated Music Roll Co., 10 West 23rd St., New York City, N. Y.

Dear Sir: Replying to your favor to hand, we are sending
623 you by this mail, our General Catalogues, and shall be pleased to allow you a discount of half and ten on any music you may desire.

Yours truly, BOOSEY & CO.

211-213-215 GRAND AVE.,
MILWAUKEE, WIS., *May* 5, 1903.

The Perforated Music Roll Co., New York City.

GENTLEMEN: Agreeable to your favor of the 1st inst., I inclose herewith a list of some of my publications, and beg to state that my very lowest jobber's rates is ½ and ½ off. If you can order them in large quantities, say 100 copies at the time, assorted, we will furnish you the same at the special rate of 80% off net.

The Circé Waltzes are entirely new, in fact, they are now in press and will not be out for several weeks.

Among the most popular instrumental pieces are,

La Moscovite.
Morning Glory.
American Cavalry March.
Calvé Waltzes.
The Mandalay Two-step.

Among the Vocal,

Take me Back to The Old Virginie Shore.
Girl With the Kangaroo Walk.
Choir Boy's Dream.
I Can Forgive But Not Forget.
'Twas But a Dream.
On the Road to Mandalay.
Hot Time.
Be My Own.
Lucy-oo-cy-oo.

Yours truly, JOSEPH FLANNER.

624 NOS. 6, 8 & 10 FOURTH AVE., COOPER SQ.,
NEW YORK, *May* 7, 1903.

The Perforated Music Roll Co., New York City.

GENTLEMEN: Your letter dated May 1st addressed to Mr. Chas. J. Orth, Milwaukee, Wis., was referred to me, inasmuch as I have purchased the catalogue of the party referred to and his editions are embraced in my catalogue, a copy of which was recently mailed to you in response to a similar request.

Anticipating the pleasure of booking your frequent valued orders, I beg to remain,

Respectfully yours, C. FISCHER.

105 AND 107 W. FOURTH ST.,
CINCINNATI, *May* 7, 1903.

Perforated Music Roll Co., 10 W. 23rd St., N. Y.

GENTLEMEN: We have your favor of recent date duly to hand and noted. Under separate cover, we send you catalogue as requested, and beg to advise that we will be pleased to furnish you any of the pieces listed therein at the usual trade rates according to the following: On sheet music, 2/3 off; octavo, ½ off, and books about ¼ off. This latter, however, varying, depending entirely upon the books

desired. Transportation always extra. Terms 5% cash, thirty days.

Trusting we may have the pleasure of your patronage, we beg to remain,

Very respectfully, THE GEO. B. JENNINGS CO.

625 113 SOUTH BROADWAY (OLYMPIC THEATER BUILDING),
ST. LOUIS, MO., *May 8th*, '03.

Perforated Music Roll Company, New York.

GENTLEMEN: We are sending you to-day some of our latest publications of sheet music, as requested in your letter of recent date, in which you state, that it is desired to make perforated sheets of same. Sometime ago we sent you some of our publications, and would ask that you kindly advise if perforated sheets were made of them, or if possible advise, if any were distributed in St. Louis.

Kindly favor us with a prompt reply, and oblige,

Very truly yours,

J. PLACHT & SON,
J. PLACHT, JR., *Manager*.

98 MAINE ST.,
BANGOR, MAINE, 5/12/1903.

The Perforated Music Roll Co., New York, N. Y.

GENTLEMEN: In reply to your favor of the 23 ulto. I have sent under separate cover sample copies of my best publications and beg to say I will furnish same in any quantities for 10c. per copy.

Very resp. M. H. ANDREWS.

Cross-examination by COMPLAINANT'S COUNSEL:

X Q. 6. Please enumerate the various piano and other automatic players for which you cut music?

A. We aim to cut perforated rolls for all the players which are manufactured.

X Q. 7. Besides music for piano-players, you cut music for other automatic instruments. Please give the names of these instruments?

626 A. It is impossible to name them, because there are some of them that we are able to cut rolls for for which we have not cut. We cut for automatic banjos, automatic xylophones and nickel-in-the-slot devices producing music by various means.

X Q. 8. Are the rolls for which you cut for many of the piano-players of different manufacture cut from the same master?

A. No, sir.

X Q. 9. Do you mean that for each instrument you make a *separate* master?

A. No, sir. The instruments differ in scale, width and with our method it is necessary to have a master or original for such instruments as vary in scale widths. Such instruments as use the same scale width use with our method the same master, such as the Angelus, Simplex, Pianista, Playano, Pianola, Chase & Baker, Bello-

lian, Karn, Pianotist, Pianophone, Pianima and several others, the names of which I cannot at present remember. In these instruments that I have named the same master may be used, for the production of the rolls, but I do not necessarily mean that the completed roll is in every case interchangeable in the various instruments, but the rolls are interchangeable in the following, for example: Chase & Baker, Karn, Bellolian, Pianola.

X Q. 10. Who makes the Bellolian?

A. The Bell Organ & Piano Company, of Guelph, Ont.

X Q. 11. In the past your company perforated and it still perforates from the rolls made by the Aeolian Company?

A. Not altogether.

X Q. 12. In the past your company, however, did to a considerable extent perforate from the Aeolian rolls?

A. Yes, sir.

627 X Q. 13. Are these forty letters all the letters which your company received in reply to the circular letter sent out?

A. Those are all the letters which bear on the subject at all, and the circular letters *has* not as yet been completely forwarded to the sheet-music trade—they are still going out.

X Q. 14. It is a fact, is it not, that only five of the forty letters refuse to give you the privilege asked for, on the ground that the writers of the letters had already given the exclusive privilege to the Aeolian Company?

A. Yes, five of the forty refer to a contract with the Aeolian Company.

X Q. 15. The other thirty-five offer to give you the privilege asked for?

A. Yes, sir.

It is stipulated between counsel that official or regularly published copies of foreign statutes and decisions of foreign courts may be produced and read at the hearing with the full force and effect of duly authenticated copies of the same, provided they shall be accompanied by an affidavit of an attorney or counselor at law of the country to which they pertain as to the time during which such laws were or are in force, and the authenticity of the decisions, and provided such copies authenticated as aforesaid are submitted to opposite counsel on or before September 1, 1903, so far as the defendants is concerned, and ten days before the hearing, so far as complainant is concerned.

Signature waived.

628 United States Circuit Court, Southern District of New York.
In Equity.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

UNITED STATES OF AMERICA,
Southern District of New York, ss:

I, John A. Shields, Standing Examiner of the United States Circuit Court for the Southern District of New York, do hereby certify that on the days indicated in the foregoing deposition I was attended by Charles S. Burton, Esq., counsel for defendant, and Louis C. Raegener, Esq., counsel for complainant, and by the witnesses Garrett Smith, Dudley Buck, George William Walter, John H. Hughes, Adolph L. Janso, F. W. Hedgeland, W. J. Henderson, Frederick Hopkins, Arthur Conrow and James S. Holmes, Jr.; and the said witnesses, having been by me first duly cautioned and sworn to testify the truth, the whole truth and nothing but the truth in the above entitled cause, gave their depositions, which were reduced to writing in the presence of the witnesses and from their statements by a typewriter appointed by me for that purpose, the signature of the witnesses to their respective depositions being waived by consent of counsel for the respective parties. That said depositions were taken pursuant to the annexed notice at the office of Wilcox & Brodek, No. 220 Broadway, New York City, beginning on the 13th day of May, 1903, and continued from day to day, as set forth in said depositions. That the several exhibits recited were offered in evidence and marked as specially noted in the foregoing depositions.

And I do further certify that I am not of counsel nor
629 attorney for either of said parties, nor in anywise interested in the event of the cause in said caption and depositions named.

In witness whereof I have hereunto subscribed my name this 29th day of July in the year of our Lord one thousand nine hundred and three, and of the Independence of the United States of America the one hundred and twenty-eighth.

JOHN A. SHIELDS, *Examiner.*

630

Nos. 110 & 111.

W. S. M. P. Co. v. A. Co.

E. P. NEEDHAM.

AUTOMATIC WIND INSTRUMENT.

No. 191,460. Patented May 29, 1877.

Fig. 1.

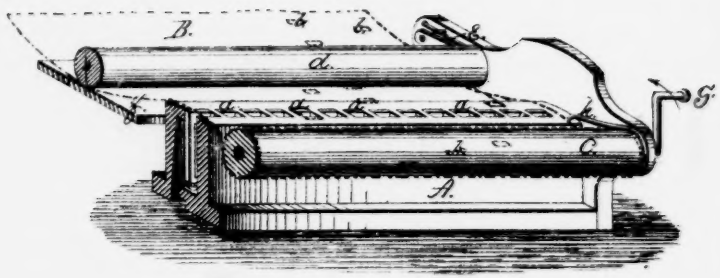
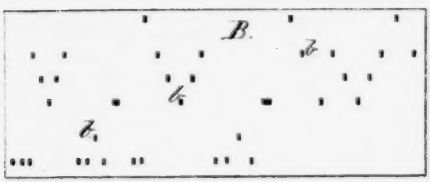


Fig. 2.



WITNESSES.

R. W. Eaton

L. P. Langworthy

INVENTOR.

Elias P. Needham

by Joseph A. Miller

Attorney

UNITED STATES PATENT OFFICE.

ELIAS P. NEEDHAM, OF NEW YORK, N. Y.

IMPROVEMENT IN AUTOMATIC WIND-INSTRUMENTS.

Specification forming part of Letters Patent No. **191,460**, dated May 29, 1877; application filed February 5, 1877.

To all whom it may concern:

Be it known that I, ELIAS P. NEEDHAM, of the city, county, and State of New York, have invented certain new and useful Improvements in Wind-Instruments; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a perspective view of my improvement in wind-instruments, a portion being shown as broken off in order to more clearly show the other parts. Fig. 2 represents a piece or sheet of paper or other material, so arranged as to form the valve for any desired number of reeds or other sound-producing instruments, and perforated so as to allow at certain points, and for certain spaces of relative time, the wind to pass through the same and produce the desired pitch and duration of tone.

This invention relates to improvements in reed or other organs operated by wind, and provided with long sheets or rolls of paper or other material, having holes to represent exactly the notes of different pieces of music, (which paper is made to serve as a valve to cover air-passages which lead to or from the reeds or other means of producing the sounds,) and by the movement of the sheet over the surface of the air ducts the desired sounds are produced; and the invention consists in the construction and arrangement which will be more fully hereinafter described and claimed.

In the drawings, A represents a set of reeds tuned to correspond with a regularly graduated scale of notes. B represents a sheet of paper or other suitable material, provided with perforations to correspond with the note desired to be sounded, and the duration of the same.

The sheet B forms the valve to all the reeds, and the apertures *b b*, when over the reed-cell, will allow the wind to pass through the reed or vibrating-chamber, and thus sound the note and act as a valve on all the notes of the instrument, except those to be sounded, to produce any desired tune, all as usual and well known.

In the drawings, *c* is a roller on which the prepared sheets may be or are wound. *d* is a hinged roller pressed down on the sheet by the spring E. *f* is a platform or table. G is a crank, by means of which the roller is turned, and which may be so arranged as to work a set of bellows. *a a* represent apertures or wind-passages; *b b*, apertures in the sheet, corresponding to the note to be sounded, the duration of the same, and the location of the notes in the instrument.

Two rollers, *c*, and two rollers, *d*, may be used, and the sheet may be passed between them, and such rollers may be covered with some elastic material, or held together by means of springs or any other method.

h represents a guide by which the sheet is maintained in the proper position, as it is important that the perforations shall be accurately guided to the location of the proper sound-producing instrument.

I am aware that it is not new to use perforated paper sheets or plates to act as valves for musical instruments operated by wind, as such have been heretofore used; but

What I claim is—

The combination, in a reed-organ, of the perforated roll or sheet of paper, acting as a valve to the reeds, with the hinged roller or rollers *d* and springs E, substantially as and for the purpose described.

E. P. NEEDHAM.

Witnesses:
ALONZO BRYMER,
CHAS. A. NEEDHAM.

Nos. 110 & 111.

W. S. M. P. Co. v. A. Co.

H. B. HORTON.

Automatic Musical Instrument.

No. 196,529 Patented Oct. 30, 1877.

Fig 1.

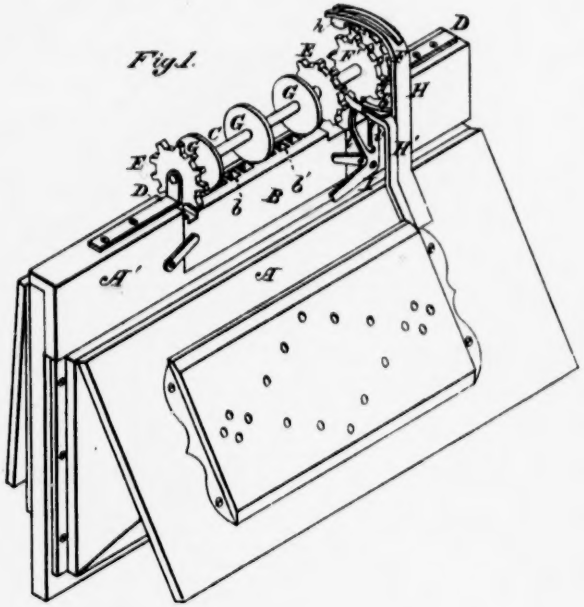
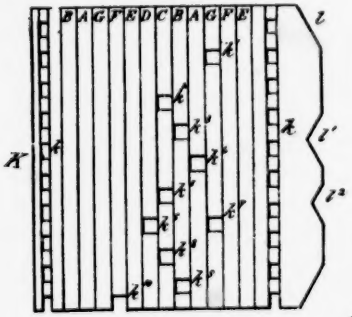


Fig 2.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UNITED STATES PATENT OFFICE.

HENRY B. HORTON, OF ITHACA, NEW YORK.

IMPROVEMENT IN AUTOMATIC MUSICAL INSTRUMENTS.

Specification forming part of Letters Patent No. **196,529**, dated October 30, 1877; application filed April 3, 1877.

To all whom it may concern:

Be it known that I, HENRY B. HORTON, of Ithaca, in the county of Tompkins and State of New York, have invented a new and useful Improvement in Wind Musical Instruments, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective representation of an instrument of the accordion class embracing my improvement. Fig. 2 is a plan view of a perforated strip, which I term the "valve" or "valve-sheet," forming a part of my invention, and used in connection with the instrument.

My invention is specially applicable to wind-instruments having pipes or reeds, such as are usually operated by keys and supplied with air by a bellows, and its object is to enable tunes to be played by persons unacquainted with music, and to assist learners in acquiring a knowledge of musical notes; and my invention consists in the construction hereinafter described.

In the drawings, A represents the wind-chest or bellows; B, the reed-board, containing reeds and cells *b b'*, &c., of different pitch, for producing the various musical notes. To the part A' standards D D are attached, having bearings which receive the ends of shaft C. This shaft can be rotated at a greater or less speed, in the manner hereinafter described.

Several reed-boards, B, of varying compass, may be provided for the instrument, giving it a more extensive range.

Fixed on the shaft are two spur-wheels, E E, which engage the valve-sheet K and move it forward, and two others, F F', which cause the shaft to rotate; also, the plain disks G G G, which press the valve-sheet down and hold it in close contact with the top of the reed-board. H H' are bent arms connected with or attached to the bellows B, and carrying clicks *h h'*, which engage with the wheels F F', to cause the rotation of the shaft C.

I is a bent lever, having free movement on a pivot at its elbow, and provided with an intermediate arm, *i*, which is pressed against by the edge of the valve-sheet K, and serves to throw the click *h'* out of contact with the teeth of wheel F'. There may be more than one of these accelerating-wheels F' and accompanying bent levers I.

The valve-sheet K is made of card-board or other suitable thin material. It has on each side a row of equidistant perforations, *k k*, to receive the teeth of the wheels E E when it is applied to the instrument, the two working after the manner of a rack and pinion.

Other perforations, k^1 k^2, &c., of equal width with the mouths of the pipes, are made at suitable intervals and in proper places longitudinally of the valve-sheet, and in line with the pipes, for the purpose of allowing the air expelled by the bellows to issue from each pipe at proper times, and cause it to produce its appropriate note. These openings may be made of various lengths, so as to govern the duration of the note, making a semibreve, crotchet, quaver, &c., as may be required. That portion of the valve-sheet not thus cut away, being pressed firmly down by the disks G G G, closes the mouths of all the pipes except the one which may be immediately under one of the openings, and prevents air from escaping from them; consequently they emit no sound. A separate valve-sheet is provided for each tune. The number, length, and position of the openings k^1 k^2, &c., in each correspond to those of the notes in the tune, which are sounded successively as each opening comes over the proper reed-cell.

The edge of the sheet has indentations *l l'*, &c., at those places where a more than ordinarily rapid succession of the notes is required, and in pieces demanding a quick movement it may be made narrower throughout its length, so that the click *h'* may constantly engage the wheel F'.

When it is desired to perform a tune, the appropriate valve-sheet is placed over the reed-board B, so that the perforations *k k* at the edges of the sheet may be engaged by the teeth of the wheels E E. Working the bellows A reciprocates the arms H H', causing the click *h* to successively engage the teeth of the wheel F, rotating the shaft C, and advancing the valve-sheet K. Each of the openings k^1 k^2, &c., is thus brought in its due order over the corresponding reed-cell b^1 b^2, &c., permitting the escape of air therefrom, and the note is sounded. Where the valve-sheet K is of full

width, its edge, pressing against the middle arm *i* of the bent lever I, presses that lever back, and the click *h'* does not engage the wheel F'; but where the edge of the sheet is cut away, the horizontal arm of the lever falling by gravity, the upper edge of the vertical arm *i'* is brought into contact with the under side of the click *h'*, throwing it up, so that it engages with the wheel F', which then acts alternately with the wheel F, imparting more rapid rotation to the shaft C, and, by accelerating the motion of the valve-sheet, quickens the movement of the piece.

Though I have only represented my invention as applied to an accordion, yet it is obvious that it is applicable to instruments in general having a plurality of pipes, tubes, or reeds, and that the devices shown may be modified in various particulars without departing from the essential features of the invention. For example, in certain cases a pedal or treadle might be used to operate the devices which move the valve-strip, or the same might be actuated by automatic mechanism. The arrangement of the click-bearing arms, clicks, spur-wheels, end disks, or substitutes therefor, may also be variously modified.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The valve-sheet K, constructed upon one or both sides with lateral indentations *l l'*, &c., to give a quick movement to the music, substantially as described.

2. The valve-sheet K, constructed with apertures *k k*, note-apertures k^1 k^2, &c., and lateral indentations *l l'*, &c., substantially as and for the purposes described.

3. In combination with the valve-sheet K, constructed with apertures *k k*, the cog-wheels E E and disks G G, mounted on shaft C, for holding the valve-sheet down in place and advancing it over the pipes, substantially as described.

4. In combination with the cog-wheels E E, the ratchet-wheels F F' and clicks *h h'*, for operating the valve-propelling mechanism and giving a quick movement thereto, substantially as described.

5. In combination with the bellows A, the arms H H', secured thereto and operated thereby, and provided with clicks *h h'*, substantially as and for the purposes described.

6. In combination with arm H' and click *h'*, the bent lever I, substantially as and for the purposes described.

7. The combination and arrangement of arm H', click *h'*, bent lever I, and wheel F', for giving a quick or alternate movement with the wheel F to the valve-sheet, substantially as described.

8. The combination and arrangement of the arms H H', clicks *h h'*, bent lever I, shaft C, wheels E E F F', and disks G G, substantially as shown and described, and for the purposes specified.

9. In combination with the wind-chest or bellows A A', the reed-board B', made readily detachable from the body of the instrument, substantially as and for the purposes described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HENRY B. HORTON.

Witnesses:
CHS. G. DAY,
WM. J. TOTTEN.

Nos. 110 & 111.
W. S. M. P. Co. v. A. Co.

M. GALLY.

Mechanical Musical-Instrument.

No. 203,257. Patented May 7, 1878.

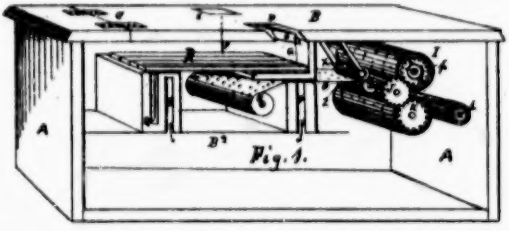


Fig. 1.

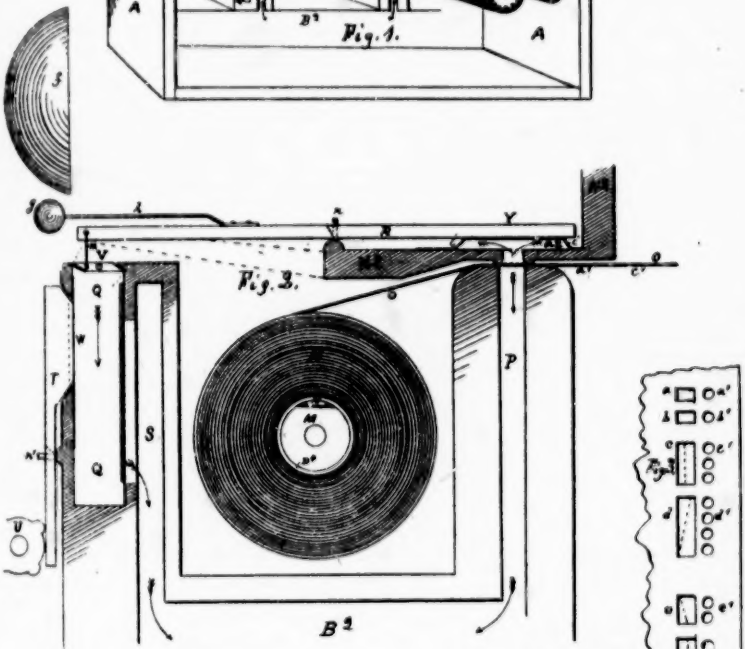


Fig. 2.

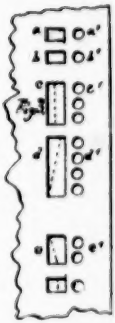


Fig. 3.

Fig. 6.

Fig. 4.

Fig. 5.

WITNESSES.

C. Hayes

Robert A. Gally

INVENTOR,

Merritt Gally.

UNITED STATES PATENT OFFICE.

MERRITT GALLY, OF NEW YORK, N. Y.

IMPROVEMENT IN MECHANICAL MUSICAL INSTRUMENTS.

Specification forming part of Letters Patent No. **203,257**, dated May 7, 1878; application filed January 16, 1878.

To all whom it may concern:

Be it known that I, MERRITT GALLY, of New York city and county, and State of New York, have invented certain new and useful Improvements in Musical Instruments; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon.

Figure 1 is a perspective view of the interior of an instrument, showing the new and improved devices. Fig. 2 is a sectional view of the key-action, &c. Fig. 3 represents a piece of the perforated sheet-music, showing the improvement in perforations for expression in the music, and also the style of perforations constructed for securing the least width of material and the greatest amount of strength and durability to the sheet. Fig. 4 represents a modification of the expression-valve D, shown in Fig. 1. Fig. 5 represents a modification of the friction device for the wheel I, shown in Fig. 1. Fig. 6 represents a modification of the valve V of Fig. 2.

My invention relates, first, to that class of musical instruments, or attachments for performing automatically upon musical instruments, which are operated by means of a perforated sheet of paper or other material.

In using perforated music-sheets for automatic instruments, it is a custom to make the sheet in form of an endless belt, as the increasing size of a winding roll, when operated automatically, is liable to change the "time" of the piece being played.

The first part of my invention consists in such a construction of the mechanism which moves the sheet as to secure to it a regular movement, and to allow only a corresponding winding of the roll. The motor-shaft J may be turned by hand or any suitable motive power. On this shaft is a roller, Z, and above it another roller, X, between which the perforated sheet is drawn by the action of the motor. The motor-shaft J is connected, either by belt, tooth, or friction-gear, to the roller I, upon which roller the sheet is wound after passing between the small rollers X Z. The wheel of roller I turns loosely on the shaft, but is provided with a friction-clutch, which causes it to turn the roller with sufficient force to wind the sheet upon the increasing roll. When the strain upon the sheet is more than sufficient to wind it upon the roll, the wheel I slips under the pressure friction-roll *p* and turns on the shaft. Thus the sheet is collected and wound on the roll I only as fast as it is allowed to pass between the motor-rollers X and Z.

The object of the second part of my invention is to provide for the rewinding of one or more rolls of music mechanically while music is being performed by the instrument.

After the sheet has been used and wound upon roller I it is necessary to rewind it before it can be used again, or the music would be reversed. In order that this can be done mechanically while another sheet is being rolled at I, the first roll collected at I is placed at L and rewound on roller K while the second sheet is being wound on roller I. Thus there is no interruption in the music from piece to piece, except the simple changing of the position of the rolls, and the several sheets are always mechanically rewound and ready for use.

The third part of my invention consists in a pneumatic-key action, which, in connection with the perforated sheet, can be used not only for operating wind musical instruments, but also those with strings, bells, drums, &c., or any instruments which may be operated by hand or mechanical action.

In Fig. 2 the perforated sheet-music is represented, by O O, passing from the roll H over the air-passage P. This air-duct is not provided with reeds, and does not produce directly any musical tone, but is used to exhaust the air from the air-chamber a^2 under the key R Y, the air being drawn through the perforations in the sheet O. The sides of the air-chamber a^2 are flexible, and allow movement of the key when pressed upon at Y.

If the key Y were placed over a chamber only equal in size to the perforations in the sheet, the action of the key would be very weak unless the perforations were very large, which would be impracticable; but by making the chamber a^2 much larger in area under the key than the perforation of the sheet, a strong action of the key is produced by the atmospheric pressure upon the entire area of the

key above the chamber. After the depression of the key it is returned to place as soon as a portion of the sheet without perforations cuts off the air-passage.

The support N^2 for key R Y, which forms the base of the chamber a^2, is cut away underneath so as to have only a slight bearing around the perforation. This base N^2 is allowed a slight spring, so that while a perforation is between the opening of the chamber a^2 and an air-duct, P, the pressure of the base N^2 on the sheet prevents leakage; but as soon as the air-duct is cut off by the sheet the reaction of the base instantly causes leakage to again fill chamber a^2, and the leverage of key R Y at *h* returns the key suddenly to place. If it is desirable to make the key very light, an ordinary spring, such as is commonly used for returning keys to position, may be used instead of gravity.

It would perhaps appear, on a cursory examination, that after the depression of the key the atmospheric pressure on follower Y would hold the base of the chamber down upon its seat, not allowing ingress of air for returning the key to place; but this is not practically the fact.

The aperture in the base being very small as compared with the area of the base, the external pressure of the air upward upon the under surface of the base causes a reaction the instant the exhaust is cut off, producing leakage, to allow the return of the key. Reaction also takes place in the air remaining in the chamber, a perfect vacuum not being caused by the exhaust. This aids materially in producing the necessary leakage.

The leakage may be increased, if desired, by closing one edge of the aperture for the exhaust, or an auxiliary aperture from the external air, by a flexible substance, which will be forced away by the internal reaction admitting the external air in an increased volume.

It may seem that the external atmospheric pressure would prevent the opening of such aperture; but the practical fact is that the internal reaction is for an instant sufficient to establish the entering current, which, having been established, is thereafter aided, instead of interrupted, by the outside pressure.

It will be seen that with a sufficient number of keys R Y any kind of musical instrument can be played, either forming part of the entire mechanism, or as an attachment to ordinary instruments, such as pianos, organs, dulcimers, drums, bells, &c.

In Fig. 2 the key R Y is represented as operating the valve of the reed of an organ, and at the same time striking a bell in accord. Strings, trumpets, &c., might be added, forming any desired combination of instruments; or the device may be used in connection with an instrument containing only one of the kinds mentioned.

In the drawing, Fig. 2, the wind-organ S is shown as operated by the same pumps as the pneumatic keys, both having a common air-chamber, B^2. They can, however, be separate, if desired.

In using the sheet O for operating the pneumatic keys R, the perforations corresponding to *c* and *d* are not required to be an elongated single opening to produce a long tone, but can be made as shown by *c' d'*—a number of small perforations near together. So long as they are near enough together for any part of one or the other to remain under the opening to chamber a^2, the key will remain depressed.

The perforations a^1 b' being separated sufficiently to produce a cut-off by the intervening material, two distinct movements of the key are produced corresponding to *a b*.

One of the advantages of the pneumatic-key action is that it will work perfectly and strongly with perforations in the sheet so small that, if used directly over the reeds, they would not produce any tone whatever. This also allows of a much narrower sheet being used, as a greater number of lines of openings can be made in the width of sheets commonly used; and by alternating the keys, or otherwise placing them in separate lines, the key-board may be comparatively short.

The fifth part of my invention consists in the peculiar construction of a voice-tremolo. The ordinary valve-tremolo produces a bubbling sound and deadens the tone, not imitating the tremolo of the human voice. The fan-tremolo is also defective in this respect. The tremolo of the human voice is produced by a rapid contraction and expansion alternating in the walls of the passage to the larynx; but the free and clear passage of the tone is not obstructed.

To imitate this tremolo, I make an opening in the side of the air-duct Q, Fig. 2, and cover this opening with a flexible wall, W.

To the outside of the wall I attach the vibrating motor T. When the vibrator is thrown to the dotted line the air in the duct is suddenly expanded, and again condensed on the return of the vibrator. The tremolo is thus produced without in the least obstructing the duct, and the tremolo of the voice is closely imitated in a clear, full tone.

The vibrator T may be operated by wind-wheel, or by any mechanical action that will produce a simple vibrating motion.

The sixth part of my invention consists in a mechanism operated by perforations in the music-sheet to produce expression of tone, as very soft, soft, loud, very loud, &c. The reeds, cords, bells, or other musical devices are inclosed to shut in the sound, as shown in Fig. 1, and valve-doors E D (more or less in number, as desired) are connected with operating-keys, so that the valve-doors are opened or closed, as indicated, by perforations for such keys in the music-sheet representing the expression required.

A modification of this device is shown in Fig. 4, in which the valve-door is operated by a lever, the end of which rides upon the sur-

face of the sheet, except as it meets with perforations, depressions, or elevations indicating the changes of expression.

The seventh part of my invention consists in attaching to the end of the music-sheet a tube, D^4, or in forming a tube of the end of the sheet rolled upon itself and made fast in form of a tube, and in providing a stop to prevent the turning of the tube on the roller of the instrument. This tube answers two important purposes: first, of a roller, on which the sheet-music is rolled when not in the instrument, and, second, of an easy method of preparing the sheet for inserting or removing it from the instrument. The tube is made slightly larger than the roller of the instrument, so that the roller may be easily thrust into it. A small recess is cut into one end of the roller, and a small block, N, is fastened to the inner surface of the end of the tube. This block enters the recess of the roller, and prevents turning of the tube on the roller, and secures a positive winding of the sheet as the roller turns. The rollers are made movable from their journal-bearings, so that they can be readily removed from the instrument to receive the rolls and be replaced at will.

The pneumatic-key action may be otherwise than mechanically operated, or it may be used for general purposes, aside from musical instruments, for producing mechanical movements or operating certain parts of instruments, or for machines, such as looms, &c., according to arranged plans or intervals. I however reserve this matter for another specification; also the construction of the valve V of Fig. 2, and its modification in Fig. 6; also the shape of the perforation *c d s*. (Shown by the dotted line in Fig. 3.)

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the perforated music-sheet and mechanism for moving the same, of the roller I, provided with slipping gear, to cause the winding of the roll to correspond with the proper movement of the sheet, substantially as specified.

2. The combination, with a musical instrument and perforated or other music-sheet, of a rewinding mechanism, which is operative while music is being performed by the instrument, substantially as specified.

3. The combination of follower Y, air-chamber a^3, and air-duct P with sheet O or other cut-off, substantially as specified.

4. The pneumatic-key action, consisting, essentially, of follower Y, air-chamber a^3, and air-duct P, with sheet O or other cut-off, in combination with reeds, strings, bells, stops, pipes, or other devices for producing or effecting musical tones.

5. The pneumatic-key action, consisting, essentially, of follower Y, air-chamber a^3, and air-duct P, with sheet O or other cut-off, having an inlet to the air-chamber adapted to be closed, or a loose joint between the air-chamber and air-duct, adapted to be held closed by atmospheric pressure during the continuance of the exhaust, but which is thrown open by the momentary counteraction of such pressure by the recoil of the air in the partially-exhausted chamber a^3 when the exhaust is suddenly cut off, substantially as and for the purpose specified.

6. The combination, with an air-passage of a musical instrument, of a perforated music-sheet, in which perforations for the passage of air through the sheet, arranged in a single group, represents a single continuous tone, substantially as specified.

7. In a musical instrument, the tremolo, consisting of a flexible wall of the air-duct to or from the reed or pipe of a wind musical instrument, and a vibrator for vibrating the flexible wall, substantially as specified.

8. The valve door or doors D E, operated directly or indirectly by the music-sheet, substantially as and for the purpose specified.

9. The valve-doors, (one or more,) in combination with the pneumatic key or keys Y, substantially as specified.

10. The tube D^4, attached to or formed of a portion of the music-sheet, substantially as and for the purpose specified.

11. The tube D^4, attached to or formed of a portion of the music-sheet, in combination with the recessed roller and stop N, substantially as specified.

MERRITT GALLY.

Witnesses:
C. G. HAYES,
ROBERT A. GALLY.

Nos. 110 & 111.

639 W. S. M. P. Co. v. A. Co

M. J. MATTHEWS.

Mechanical Musical Instrument.

No. 204,352. Patented May 28, 1878.

Fig. 1.

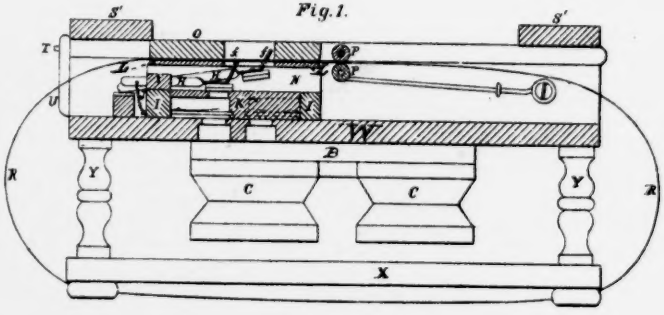


Fig. 2.

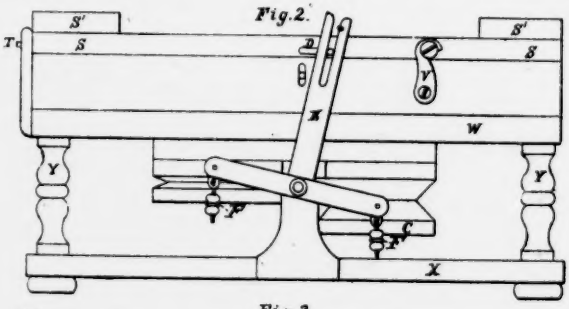
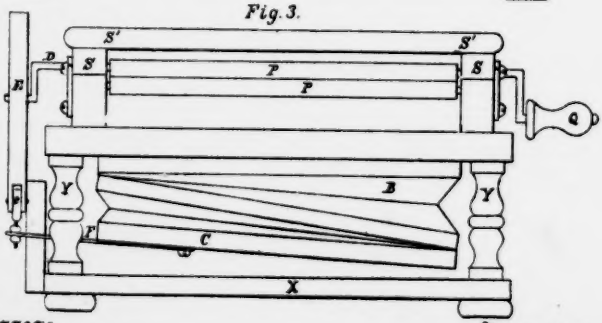


Fig. 3.



Witnesses:

Robert Wm Matthews.

Geo. A. Darling.

Inventor:

Marcus J. Matthews

UNITED STATES PATENT OFFICE.

MASON J. MATTHEWS, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN MECHANICAL MUSICAL INSTRUMENTS.

Specification forming part of Letters Patent No. **204,352**, dated May 28, 1878; application filed December 11, 1877.

To all whom it may concern:

Be it known that I, MASON J. MATTHEWS, of Boston, in the State of Massachusetts, have invented a new and useful Improvement in Mechanical Musical Instruments, which improvement is fully set forth in the following specification, of which the accompanying drawings form a part.

My invention relates to mechanical wind-instruments in which perforated paper is used to produce music automatically.

It consists in the arrangement of a series of valves directly between a corresponding series of air-passages to reeds and a perforated sheet of paper, in such a manner that the paper, as it is caused to pass along, shall hold the whole series of valves to their seat or bed, excepting at such intervals as are determined by the position and length of the perforations in the paper, and their relation to their corresponding valves.

It further consists in a compactly-constructed bellows, and of a simple and novel means of operating them.

It also consists in such a form of construction as provides for the easy removal of the sheets of paper when a change of tune is desired.

Figure 1 is a sectional elevation of one of the sides of my instrument, representing the reed-board, chamber-cap, pressure-cap, and bellows. Fig. 2 is an elevation of one side of my instrument, representing the manner in which the bellows are operated. Fig. 3 is an elevation of one of its ends with the music removed.

B is the reservoir; C C, the feeders. The reservoir B is mounted on the under face of the platform W. The feeders C C are mounted on the lower board of the reservoir B. This is a simple and compact form of construction, involving the employment of the least possible space, and requiring no supplementary wind-chest, such as is ordinarily employed in reed-instruments.

The feeders C C are operated by the crank D through the medium of the three-armed lever E, the toggles *e*, and the wire projections F. As the bellows and the music-sheet are both operated by the same handle, it is necessary that some provision be made to prevent the jerking that would be consequent upon a continuous turning of the handle when the reservoir is exhausted. This is secured in the wire projections F.

The tube-board is constructed similar to that of a key-board cabinet-organ, the main difference being that the tubes are not directly opposite each other, but are arranged and located so that the tubes of one row are opposite the partitions between the tubes of the other row. The reeds are inserted in these tubes in alternate succession, each consecutive reed in the scale being in a different row.

The object of this arrangement is to bring the push-points *f f* of the valves H H as close together as is practicable, so that there may be used a narrower sheet of paper than would be necessary for the same number of reeds if they were all located in one row. The mouths of the tubes are closed by the strips I I, and a hole is made through the tubes directly over the reeds. These holes are controlled by the valves H H. The springs J tend to keep the valves H H away from their seat. Screwed or otherwise fastened to the top of the tube-board K is a chamber-cap, L. The valves are all mounted within the chamber N.

Through the top of the chamber-cap L are a series of holes corresponding to the push-points *f f* of the valves H H. There is also a series of holes through the pressure-cap O, corresponding to the series of holes through the chamber-cap I. The pressure-cap O is held down by a spring of sufficient strength to resist the force of the springs J. The perforated sheet is inserted between the pressure-cap O and the chamber-cap L, and between the friction-rollers P P, so that when the handle Q is turned the rollers P P draw the perforated sheet R along and over the push-points *f f* of the valves H H, and thus hold them closely to their seats, excepting at intervals provided for by the perforations. The exhaust power of the bellows, combined with the perforated sheet, keeps the valves on their seats. The springs J are little more than strong enough to resist the wind force exerted on the valves H H, so that the friction of the push-points *f f* on the perforated sheet is very slight.

The two ends of the perforated sheet R are joined together, so as to form a continuous

band or roll, passing over the chamber-cap L around each end and between the feet of the instrument.

Provision for facilitating the mounting and removal of the perforated sheet R is made in the movable guide-rails S. In one end of each guide-rail S is a stud, T. This stud T passes into a hole in the holder U. The other end of each guide-rail is held down by a hook, V. The guide-rails S are held together by the cross-rails S', so that the whole forms an easily-handled frame. Between the platform W, upon which the main parts of the instrument are mounted, and the base-board X are pillars Y, so that the bellows and action which operates them are exposed to view. The case may be of any suitable design.

The base-board X might be dispensed with, and the action might be supported on turned legs. Instead of the turned pillars, square posts might be used, and wire-gauze, neatly stenciled, might be stretched around them, so as to cover in all sides and conceal the bellows; or the whole action might be incased in wood.

The bellows might be mounted so that their movements would be parallel with the sides of the instrument, or in any other desirable position, so that they might be operated by pulleys and cord in connection with a crank, or by friction-pulleys and crank; or they might be operated by a rocking shaft mounted below the feeders and connected with the crank.

The tube-board might be constructed so that the reeds inserted therein would stand in a vertical position and the valves rest on the mouths of the tubes, instead of as shown.

The valves H H may be made of either metal or wood, and they may be hinged with leather or other suitable material.

I am aware that perforated paper has been used in connection with valves and levers, so that I do not claim the mere combination of such sheets with valves, nor with levers and valves; but

What I claim, and desire to secure by Letters Patent, is

1. In combination with reeds and their air-passages, and a perforated sheet of paper, a series of valves, constructed and arranged to be held to their seat or bed by the combined action of the said perforated sheet and pneumatic pressure, substantially as described and shown.

2. In combination with reeds and their air-passages, together with a series of valves, H H, constructed substantially as described, a continuous roll of perforated paper, all as and for the purpose set forth.

3. The combination and arrangement of the friction-rollers P P and three-armed lever E with the adjustable toggles *e* and feeders C C, when constructed and arranged substantially as described.

4. The combination of the friction-rollers P P and perforated paper R with the valves H H, substantially as set forth.

5. In combination with an endless sheet of perforated paper and the valves H H, the removable guide-rails S, substantially as and for the purpose specified.

6. In a mechanical musical wind-instrument having reeds and an endless band or sheet of paper, suitably perforated to produce a tune in connection with valves, the reeds arranged in alternate positions in two rows, substantially as specified.

MASON J. MATTHEWS.

Witnesses:
N. C. LOMBARD,
E. A. HEMMENWAY.

642

Nos. 110 & 111.

W.S.M.P.Co. v. A.Co.

N. R. MARSHMAN & M. J. MATTHEWS.

Mechanical Musical Instrument.

No. 209,492. Patented Oct. 29, 1878.

Fig. 1.

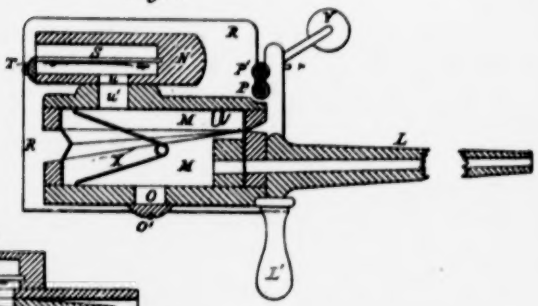


Fig. 3.

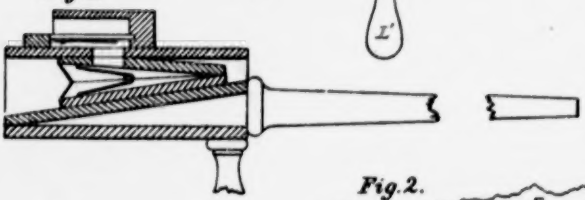
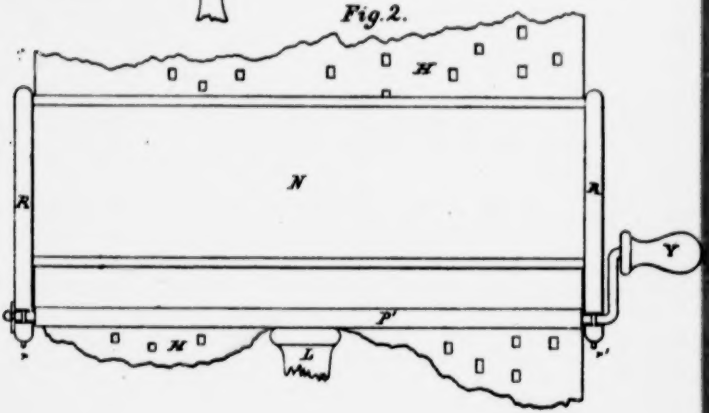


Fig. 2.



WITNESSES:

Morris Harris
Josie Harris.

INVENTORS:

Newman R. Marshman
Marcus J. Matthews

UNITED STATES PATENT OFFICE.

NEWMAN R. MARSHMAN, OF NEW YORK, N. Y., AND MASON J. MATTHEWS, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN MECHANICAL MUSICAL INSTRUMENTS.

Specification forming part of Letters Patent No. **209,492**, dated October 29, 1878; application filed May 22, 1878.

To all whom it may concern:

Be it known that we, NEWMAN R. MARSHMAN, of New York city, State of New York, and MASON J. MATTHEWS, of Boston, Massachusetts, have invented a new and useful Improvement in Mechanical Musical Instruments, which invention is fully set forth in the following specification.

Our invention relates to a mechanical musical instrument or toy in which is employed a perforated sheet of paper as a slide-valve to control the admission of air to the reeds.

It consists in the combination of a sheet of paper or other flexible material, perforated at suitable intervals to produce a tune or chord, with a series of reeds or other sound-generators and an air-chamber or wind-chest, provided with a mouth-piece adapted to be blown into by the mouth and from the lungs of the performer.

It further consists in a flexible wind-chest, constructed, arranged, and adapted to be held against the perforated valve-sheet by spring-power and by the force of wind blown into it.

The object of this feature of our invention is to secure the necessary conditions consistent with a satisfactorily-working instrument.

The following specification, of which the accompanying drawings form a part, clearly sets forth the nature and manner of construction of our invention.

Figure 1 represents a section as across or through the center of the instrument. Fig. 2 is a plan view, showing our instrument with the music-sheet mounted thereon. Fig. 3 represents in section a modification of Figs. 1 and 2.

As some of the parts to be described are duplicates of each other, we use the singular and plural number interchangeably.

L is the blow-pipe. M is the wind-chest. N the tube-board containing the reeds. H is valve music-paper. A series of reed-holes or tubes, S, are bored into one of the sides of the tube-board N. The reed *w*, represented as having the vibrator or tongue on its lower side, is inserted in grooves made in or about the middle of the tube S. The tube S is thus divided into two compartments. The lower compartment is closed at the mouth by the strip T. An air-passage, *u*, is made through the floor of each tube S.

The wind-chest M is constructed in two parts. A strip of rubber cloth is glued and tacked all around the inside of these parts, and thus the equivalent of a puppet-bellows is formed, having a hinge at U. A series of holes, *w'*, corresponding to the series of holes *w*, are made through the top board of the wind-chest M. The lower portion of the wind-chest M is fastened between the cheek-pieces R. The upper portion of the wind-chest M is left free to move between the cheek pieces R. The tube-board N is mounted in such a manner as to admit of easy removal, so that another of different quality of tone and pitch may be put in its place. The valve music-paper H is mounted under the tube-chest N and reeds *w*, and over and upon the upper surface of the wind-chest M. The rubber-covered rollers P P'' work in slots made in the cheek-pieces R. The roller P'' is held down by the pins *r r'*. The music-paper H is inserted between the tube-board N and the upper board of the wind-chest M and between the feed-rollers P P''. The upper or free portion of the wind-chest M is pressed against the valve music-paper H by the spring X, and also by the pressure of air blown into it to operate the reeds, and thus the necessary air-tight conditions are secured. The inside of the wind-chest M and holes *u u'* and tubes S are lined with a thick coating of shellac, to prevent the moisture penetrating the wood. Any water that may collect in the wind-chest may be poured out through the hole O, covered by the slide-valve O'. The mouth-piece L is inserted in the lower portion of the wind-chest M. The handle L' is for convenience of holding by the performer.

When the handle Y is turned the valve music-paper H is drawn along and under the tube-board or reed-chest N and between the holes *u u'*, and closes and opens them according to the music to be produced. The air blown into the wind-chest passes through the perforations in the valve music-paper H, through the reeds *w*, and over the strip T to the outside air.

In all cases hitherto where a paper valve has been employed the perforations have been

PAGE CUT OFF

of varying lengths, corresponding to the lengths of the notes of the music to be produced. In our invention, for the purpose of performing slow airs, we make the perforations all of or about one uniform length. By this means we save length of paper and afford the performer facility for prolonging the notes and producing expression at will.

We do not confine ourselves to the precise details hereinbefore described. The instrument might be constructed on the plan represented in Fig. 3. The parts made of wood might be made of metal, vulcanized rubber, or other material. A pressure-bellows might be employed, and the mouth-piece L be dispensed with. We purpose making instruments on this plan. The mechanism suggested in the modifications named is simple and well known, and without any further description could be easily constructed by any skilled mechanic.

We claim as our invention and desire to secure by Letters Patent—

1. In a musical instrument provided with a mouth-piece adapted to be blown into by the mouth and from the lungs of the performer, a sheet of paper or other flexible material, perforated at suitable intervals to produce a tune, substantially as herein described.

2. A musical instrument in which is employed a perforated valve-sheet, a flexible wind-chest constructed and arranged and otherwise adapted to be elastically held against the said valve-sheet by tension-spring and by the force of air blown into it.

3. In a reed musical instrument provided with a mouth-piece adapted to be blown into by the mouth and from the lungs of the performer, the flexible music-sheet H, provided with perforations, all of or about one uniform length, substantially as and for the purpose set forth.

4. The tube-board N, wind-chest M, mouth-piece L, and feed-rollers P P′, in combination with the valve music-paper H, substantially as set forth.

NEWMAN R. MARSHMAN.
MASON J. MATTHEWS.

Witnesses:
R. P. MARSHMAN,
MOSES HARRIS.

Nos. 110 & 111.

W. S. M. P. Co. v. A. Co.

O. H. NEEDHAM.

Mechanical Musical Instrument.

No. 213,442 Patented Mar. 18, 1879.

Fig 1.

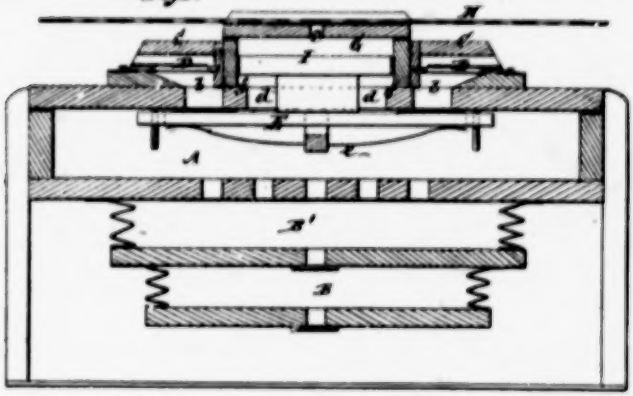


Fig 2.

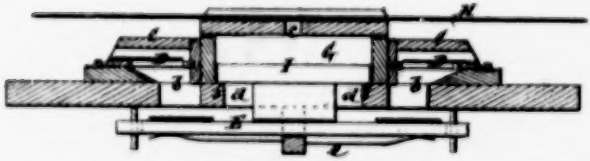
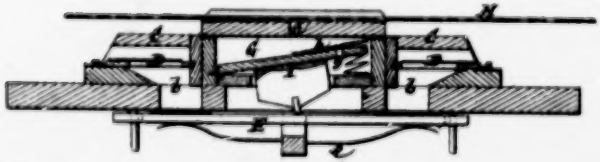


Fig 3.



Witnesses:
Geo Haynes
Edw P Jessup

Inventor.
Orrell H. Needham
by his Attorneys
Brown & Brown

UNITED STATES PATENT OFFICE.

ORWELL H. NEEDHAM, OF NEW YORK, N. Y.

IMPROVEMENT IN MECHANICAL MUSICAL INSTRUMENTS.

Specification forming part of Letters Patent No. **213,449**, dated March 18, 1879; application filed January 9, 1879.

To all whom it may concern:

Be it known that I, ORWELL H. NEEDHAM, of the city and State of New York, have invented certain Improvements in Mechanical Musical Instruments, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form part of this specification.

This invention relates to organs and other musical instruments to be operated mechanically by what has been termed a "pneumatic key action," such action being controlled by means of one or more traveling perforated strips or sheets of paper or other suitable material, operating in combination with a suction bellows or pump.

Although the invention will here be described as automatically operating the reeds of a reed-organ, it is not restricted to any particular instrument, and may be constructed either as a part of the entire mechanism of the instrument or as an attachment to various instruments, including those having strings, bells, drums, &c. It may also be used to advantage for operating swells and tremolo actions.

The object of the invention is to provide for the free return movement of the keys of such an action; and to this end the invention consists in certain combinations with the reed-chamber of the instrument or with a main air-chamber into which air is drawn for working the said keys of supplementary air-chambers, each of which is provided with an air-inlet aperture, over or outside of which the perforated sheet or strip is arranged to travel and with a follower or key, said supplementary air-chamber occupying an intermediate position relatively to the perforated strip and the reed-chamber or main air-chamber of the instrument, and the said follower or key being provided with a vent, by the opening and closing of which the free operation of the said follower or key is provided for, not only in the movement by which the sounding is produced, but also in the return movement.

Figure 1 represents a vertical section of a portion of a reed-organ having the invention applied, and showing a reed-valve closed; Fig. 2, a similar view to Fig. 1 of the same devices, in part, but showing the reed-valve open; and Fig. 3, a similar view to Fig. 1, in illustration of a modified construction of certain parts.

Referring, in the first instance, to Figs. 1 and 2 of the drawings, A represents the wind or main air-chamber of the instrument; B, the pump or bellows, and B' the usual yielding air-receiver, controlled by one or more springs, and in communication by valve and suitable apertures with the pump B and chamber A.

C C are reed-tubes, containing reeds D D, and in communication with the chamber A by apertures *b*. E is one of a series of valves which serve to open and close the apertures *b* leading to the reeds and controlling the reeds.

Arranged over the main air-chamber A are a series of supplementary air-chambers, G, each of which is provided with an air-inlet aperture, *c*, over or outside of which the perforated strip or sheet H is moved by any suitable means to produce the necessary musical effect. Each of these supplementary air-chambers G becomes a portion of the main-chamber A when the aperture *c* is closed by an unperforated portion of the strip H, but becomes an outside or independent chamber when the aperture *c* is opened by a perforated portion of the strip passing over it. To these ends each supplementary air-chamber G is in open communication by an opening, *d*, with the air-chamber A, and contains within it a follower or pneumatic key, I, which rests upon or is otherwise suitably connected with the reed-valve E, it serves to control, and which follower serves, when air is admitted through the aperture *c*, as a perforated portion of the strip H passes over the latter, both to open the reed-valve against the pressure of a suitable closing spring, *e*, thus allowing of the reed D being sounded, and by its coming down upon a seat, *f*, in the supplementary air-chamber G to shut off air from entering the main-chamber A by the apertures *c d*. This follower or pneumatic key I is of nearly the same size as the chamber G, so as to freely work within the latter, leaving only a moderate vent or space for leakage around it; consequently the pressure of the air in the main chamber A is not materially impaired by incoming air through the aperture *c* when the key I is closing, and when said key is closed over the aperture *d*

ingress of air by the said aperture *d* is still further stopped during any remaining travel of the perforated portion of the strip over the aperture *c*, thus reducing waste of air and power in working the instrument.

Furthermore, when an unperforated portion of the strip H comes over the aperture *c* the vent or leakage space around the key I serves to convert the air-chamber G from an outside or independent one to an integral portion of the main chamber A, and to establish an approximate equilibrium of pressure on opposite sides of the key I, thus providing for a free return action of the key and of the reed-valve controlled by it, external air-pressure, either directly or indirectly, on the reed-valve being shut off during the closing of the latter by the unperforated portion of the strip H over the aperture *c*.

In this way or by these means a quick and lively action is obtained for the reed-valve in closing, and there is but little waste of air in the working of said valve; but to still further reduce waste of air and power the key I, instead of being constructed as represented in Figs. 1 and 2, may be constructed, as represented in Fig. 3, of a hinged and close diaphragm form relatively to its seat *f*, with one or more air-vents, *g*, through it, covered by an elastic valve, *h*, so that as the vented key I commences to close by an unperforated portion of the strip H coming over the aperture *c*, the valve *h* will nearly shut down over the air-vent *g*, and restrict ingress of external air through it, and will cause to be utilized nearly the whole of such incoming air through the aperture *c* to the opening of the reed-valve E. When, however, an unperforated portion of the strip H comes over the aperture *c*, and closes further ingress of air by said aperture *c*, the air contained in the outer portion of the the supplementary air-chamber G will pass through the aperture *g* of the key I till a sufficient difference of pressure is established on opposite sides of it for the spring *e* of the reed-valve to close the latter.

The pneumatic key-action herein described is not applicable to reed instruments only, but to others by a suitable connection of the vented followers or keys in the supplementary air-chambers with sounding or playing devices other than reeds, so that the main air-chamber is not necessarily a reed one. Furthermore, independent bellows or pumps, if desired, may be used—that is, in the case of a reed-instrument—one pump for working the reeds, and the other for working the keys.

I claim—

1. In a mechanical musical instrument, in which the required musical effect is produced or controlled by one or more traveling perforated strips or sheets, the combination, with a reed-chamber or main air-chamber, of supplementary air-chambers arranged between the perforated strips and the main air-chamber, and provided with air-inlet apertures, over or outside of which the perforated strips pass, and containing followers or keys, substantially as specified, for operation as set forth.

2. The combination of the reed-chamber or main air-chamber A, the reeds D, the valves E, the supplementary air-chambers G, having air-inlets *c*, adapted to be opened and closed by perforated strips or sheets, as described, and the vented followers or keys I, substantially as shown and described.

O. H. NEEDHAM.

Witnesses:
T. J. KEANE,
FRED. HAYNES.

Nos. 110 & 111.

648 W.S.M.P.Co. v. A.Co

R. W. PAIN.

Mechanical Musical Instrument.

No. 218,308. Patented Aug. 5, 1879.

Fig 1.

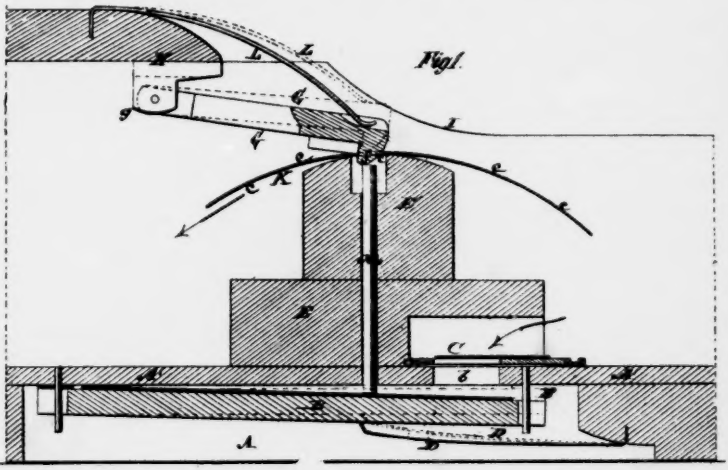
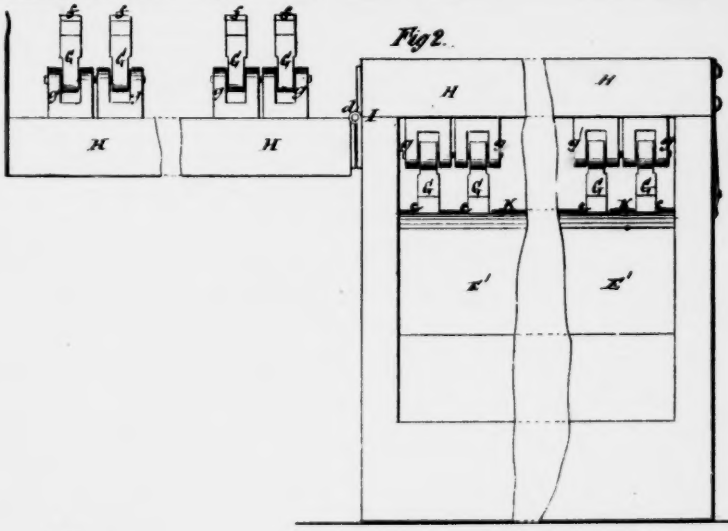


Fig 2.



Witnesses:
Fred. Haynes
L. Lille

Inventor
Robert W. Pain
by his Attorneys
Brown & Wilkinson

UNITED STATES PATENT OFFICE.

ROBERT W. PAIN, OF NEW YORK, N. Y., ASSIGNOR TO E. P. NEEDHAM & SON, OF SAME PLACE.

IMPROVEMENT IN MECHANICAL MUSICAL INSTRUMENTS.

Specification forming part of Letters Patent No. **218,308**, dated August 5, 1879; application filed September 20, 1878.

To all whom it may concern:

Be it known that I, ROBERT W. PAIN, of the city and State of New York, have invented certain Improvements in Mechanical Musical Instruments, of which the following is a description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to apparatus or means for playing on organs and other musical instruments of like character in which perforated strips or sheets of paper or other material are set in motion and by their travel or passage are made to actuate or control the action of valves which determine the admission of air to the reeds or pipes of the instrument, whereby music may be produced without any skill on the part of the player.

The improvements consist in a novel combination of the perforated strips or sheets with the sound-producing devices, reeds, or pipes and valves of the instrument, and in certain novel means through which the perforated sheets or strips are made to control the action of the valves, whereby a very effective operation of the instrument is obtained and great facility for removing and replacing the reeds afforded; also, in certain means whereby very convenient provision is afforded for the insertion of the perforated sheets or strips.

In the accompanying drawings, Figure 1 represents a vertical section of so much of a reed-organ as is necessary to illustrate my invention, and Fig. 2 a back elevation of the same.

A is the wind chest or receiver of the instrument. A′ is what is known as the "action-board," forming the top of the wind-chest and containing passages *b*, over which, in this example of my invention, reeds C are placed. E is the reed-board, containing passages *p*, in which the reeds C are placed. B B are valves arranged within the wind-chest below the reeds, and having their seats on the lower face of the action-board A′. D D are springs applied to the valves to press them upward against the board A′, for the purpose of controlling the passages *b*. Although only one set of reeds is here shown, the instrument may have two or more sets.

G G are jacks, levers, or key-moving fingers, the rear ends of which are pivoted to flanges *g*, secured to a rail, H, arranged above and behind the reed-board. The front ends of these jacks are provided with rounded or beveled downwardly-projecting noses *f*, situated over push-pins or key-moving rods M, which pass through the reed-board E, and which bear upon the valves B B. Springs L L are applied to these jacks to press them down upon the push-pins M, for the purpose of opening the valves B B. These springs must be of such strength as to overcome the upward pressure of the valve-springs D D.

K is a perforated sheet or strip of paper or other material. There may be one such strip for every valve and reed, or one for two or more valves and reeds, each having as many longitudinal rows of holes in it as may be necessary, according to the number of valves which it is intended to actuate or control. The said sheets or strips may be either continuous or not—that is to say, they may be in the form of endless bands or have their ends disconnected, and may be moved by rollers or other suitable means. The portion or portions of each sheet or strip which is at any time operative is supported upon a fixed rail or projection, E′, above the reed-board E, between which and the jacks G G the sheets or strips pass in the direction of the arrow shown near the strip or sheet in Fig. 1.

By the arrangement of parts here shown and described each perforated strip or sheet K travels, when operated to play the instrument, over the rail E′ and beneath the jacks G, or, in other words, between the jacks G and the valves B, which are on opposite sides of the perforated strip or strips, and the valves are opened by the jacks working through the perforations in the strips.

The disposition and length of the perforations in each strip K and their relation to the several valves B determine the notes or length of notes sounded by the reeds. When the unperforated portions of each sheet or strip K pass under the nose *f* of either jack G, said jack is raised and held up against the pressure of its spring L, and the corresponding valve B is closed by its spring D; but when

the perforations *c* in the sheet or strip come under the nose *f* of the jacks, then the latter is, by the greater pressure produced by the jack-spring L as compared with that of the valve-spring D, caused to depress the push-pin M and open the valve, and thereby to produce the sounding of its respective reed.

In order to provide for the easy introduction of the perforated strips or sheets between the jacks and the pins M, the jack-rail H is attached by a hinge or hinges, *d*, at one end to the frame I or case of the instrument, so that it may be turned aside or over, as shown at the left-hand side of Fig. 2, and so leave the place as to be occupied by the strips or sheets uncovered. When the latter have been introduced the rail is turned back to the position shown at the right hand of Fig. 2 over the rail E′.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a musical instrument, the combination of a perforated strip or sheet, jacks, levers, or key-moving fingers arranged on one side of said perforated strip or sheet, and push-pins arranged on the other side thereof, and the jacks, levers, or key-moving fingers arranged to operate upon the upper ends of the push-pins through the perforations in said strip or sheet.

2. In a musical instrument, the combination of a perforated strip or sheet, a series of jacks, levers, or key-moving fingers, arranged upon one side of the said strip or sheet, to operate through the perforations of such strip or sheet, and a series of keys and push-pins or key-moving rods actuated by said jacks, levers, or key-moving fingers, and situated on the opposite side of said strip or sheet.

3. In a musical instrument, the combination of valves, vertical push-pins or valve-moving rods, a perforated strip or sheet, and jacks, levers, or key-moving fingers arranged above the perforated strip or sheet, and constructed to operate upon the upper ends of the push-pins through the perforations in the strip or sheet.

4. The combination, with the valves of a musical instrument and with jacks, levers, or key-moving fingers for operating the said valves, of a perforated strip or sheet for working between the said jacks, levers, or key-moving fingers and valves, substantially as herein described.

5. The combination, with the valves of a musical instrument and with jacks, levers, or key-moving fingers adapted for opening the said valves under the control of a perforated sheet or strip, of springs for closing the said valves and springs applied to the said jacks, levers, or key-moving fingers for overcoming the pressure of the first-named springs, as permitted by the said sheet or strip, substantially as herein described.

6. The combination, with the valves B of a musical instrument and the jacks, levers, or key-moving fingers for operating the same, of a rail or support, E′, adapted to receive and support a perforated strip or sheet arranged between the said jacks, levers, or key-moving fingers and the valves, substantially as herein described.

7. The combination of the reed-board E, reeds C, valves B B, push-pins or key-moving rods M, jacks, levers, or key-moving fingers G G, and springs L L, substantially as described.

8. The rail H, supporting the jacks, levers, or key-moving fingers, hinged at the end to the frame or case of the instrument, so that it may be swung over lengthwise, substantially as and for the purpose herein set forth.

ROBERT W. PAIN.

Witnesses:
HENRY T. BROWN,
T. J. KEANE.

651 Circuit Court of the United States, Southern District of New York. In Equity.

No. 8126.

"Little Cotton Dolly."

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

No. 8127.

"Kentucky Babe Schottische."

SAME
vs.
SAME.

UNITED STATES OF AMERICA,
Southern District of New York, County of New York, ss:

Louis C. Raegener, being duly sworn, deposes and says that he is of counsel for the complainant herein. That he is thoroughly familiar with the German language and able to translate from the same into English. That the translation hereto annexed of extracts from a book entitled "Confederate Law Journal of the North German Confederation of 1870" is correct, and that the said law of the North German Confederation of June 11, 1870, remained
652 the law of the German Empire until on or about June 19, 1901, at which time the other law hereinafter referred to went into effect. That the said book entitled "Confederate Law Journal of the North German Confederation of 1870" is a standard official publication found in the library of the New York Law Institute and also in the library of the Bar Association of the City of New York.

Deponent further says that the annexed translation of a decision of the Imperial Court of Germany, found in Vol. 27, page 60, in a book entitled "Decisions of the Imperial Court of Germany in Civil Matters," is likewise correct; that said book is a standard publication, and that it is likewise found in the two libraries hereinbefore referred to.

Deponent further says that the annexed translation of the decision taken from Vol. 22, page 174, of a book entitled "Decisions of the Imperial Court of Germany in Civil Matters," is likewise correct, and that the same is taken from a standard publication found in the libraries hereinbefore referred to.

Deponent further says that the book entitled "Voigtlaender Urheber- und Verlagsrecht," published 1901 by Rossberg & Berger, of Leipzig, is a standard work on copyright, and that it contains a correct copy of the copyright law of Germany, enacted in 1901, and

that the translation of the extracts from said book hereto annexed is correct.

Deponent further says that hereto annexed is a correct extract of an act entitled "An Act to Amend the Law of Copyright," Chapter 45, passed July 1, 1842, in the fifth and sixth years of the reign of Queen Victoria, and that the said act was in force until on or about the year 1902, at which time there went into effect in Great Britain a law, passed July 22, 1902, entitled "An Act to Amend the Law Relating to Musical Copyright," Chapter 15, passed in the
653 second year of the reign of King Edward VII, also annexed hereto. That said two British Copyright Acts are found in a book entitled "The Law of Copyright;" by Thomas Edward Scrutton, 4th Edition, published London, 1903, by William Clowes & Sons, Ltd.

LOUIS C. RAEGENER.

Sworn to before me this 15th day of November, 1904.

[L. S.] E. VAN ZANDT,
Notary Public, New York Co., N. Y.

654 *Translation of Extracts from a Book Entitled "Confederate Law Journal of the North German Confederation of* 1870," *Page* 339.

No. 506. Law concerning the copyright with respect to literary works, pictures, musical compositions and dramatic works. Of June 11, 1870.

We, Wilhelm, by the Grace of God King of Prussia, &c., ordain in the name of the North German Confederation, after obtaining the consent of the Confederate Council and of Parliament, as follows:

1. LITERARY WORKS.

(*a*) *Exclusive Right of the Author.*

I.

The right to multiply a literary work mechanically is the exclusive privilege of the author.

* * * * * * *

III.

Musical Compositions.

All the provisions in paragraphs 1 to 5 and 8 to 42 are applicable to the exclusive right of the author to the multiplication of musical compositions.

655 *Translation from Page 60 et seq. of Vol. XXVII of Decisions of the Imperial Court of Germany in Civil Matters.*

No. 15. Do interchangeable note disks mechanically produced in quantities for a mechanical music box (in this case the clariphon) constitute an infringement of a copyright, the consent of the author of the musical composition on the musical note disk not having been obtained:

1. In view of the Federal law of June 11, 1870?
2. In view of the concluding clauses of the Berne Convention of Sept. 9, 1886?

(See Vol. XXII, No. 35.)

1. Civil Senate Decision of the 31st of January, 1891, i. S. W. (Kl.) w. Sp. (Bekl.) Rep. 1, 301, 190.

I. County Court Gera.

II. Court of Appeals Court of Jena.

The defendant manufactured musical instruments which he brought into commerce under the name of "Clariphon." For these instruments he also constructed interchangeable disks made of sheet metal, in which certain depressions are formed. If these disks are laid upon the cylinder, and if then the cylinder of the clariphon is operated, musical tones are produced. The depressions are so arranged that a musical composition is heard. To this class belong the Ariston, Herophon and other hand-organs of that kind with interchangeable note disks. Owing to the interchangeability of the metallic mantles placed around the disk it is possible that upon one and the same instrument as many different pieces of
656 musical composition may be played as differently arranged metallic mantles are played around the cylinder. The defendant has produced this kind of note disks with the compositions of the complainant—"So wie Du" and "Fischerin Du Kleine"—without the plaintiff's consent, and has brought them into commerce. Because of this the plaintiff demands judgment against the defendant and a declaration from him to the effect that he has no right to produce note disks for the Clariphon upon which the musical compositions of the plaintiff are found. In the lower Court the suit was dismissed. An opinion of the Society of Musical Experts at Weimar was asked for by the Court upon two questions:

(*a*) Whether a musical expert, without great difficulty, would be capable of reading the melodies from the metallic mantles upon the clariphon cylinder.

(*b*) Whether the clariphons manufactured by the defendant, and upon which one may play the compositions of the plaintiff, "Fischerin Du Kleine" and "So wie Du," may be considered an infringement of the copyright within the meaning of the law of June 11, 1870.

The expert opinion answered both questions in the negative.

With respect to the first question hereinbefore referred to, the expert opinion contains the following statement:

"After careful examination of the samples of metallic mantles produced, we have come to the conclusion that a reading (in the

ordinary, common and customary sense of the word) is not possible even on the part of musical experts; that only after very careful study of the many long or short elevations located upon the
657 metallic mantles at various distances, and their position towards each other, a decipherment is possible; and that in order to recognize the musical composition, a translation of these elevations into longer or shorter notes is necessary, and one must also imagine a net of parallel lines crossing at right angles, by means of which the pitch and measure can be determined."

The opinion then continues that the Association of Experts examined a mantle in which the melody "Wacht am Rhein" was impressed. The well known melody was soon recognizable, while the accompaniment could only be deciphered with difficulty.

The opinion then continues:

"Unknown melodies might be very difficult to read, even for the musical expert, and possibly not at all, because the metallic mantles frequently lack accuracy in spacing and in the shape of the elevations.

It might also be remarked that the reproduction of the melodies musically considered, with respect to harmony and pitch, are not faultless, and are limited to only twenty-four notes. No musician or half-way musically educated individual will take the trouble to use these metallic mantles in place of the printed or written notes, and will lose time in the decipherment of the same; the elevations of different form and size upon the cylinder and corresponding to the rotations of the cylinder can by no means be discerned with the same absolute certainty and ease as our present note sheets, which are so perfect in every respect that they give one the
658 pitch duration of the tones, as well as the measure, with the greatest certainty and clearness."

In answering the other question in the negative, the Society of Experts is of the opinion that the prohibition with respect to the infringement of copyright relates only to printed or written music in the ordinary readable form of notation, and does not relate to such as are found upon a metallic strip used upon a musical cylinder; this metallic mantle being a necessary integral part of the instrument. Just as the instrument without it can produce no sounds, so it without the instrument, as appears from its whole construction, would be only a worthless strip of metal, because it could not be used for any other purpose, as, for instance, to replace sheet music for the reproduction of a musical composition upon some other instrument.

The appellant produced upon the argument parts of an article by Henri Rosmini, which were published by the Berne University, "Le droit d'Auteur," of Sept. 15, 1890; also the reproduced statement of Numa Droz (who at that time presided at the Berne Conferences) contained in this article. In this statement the author agrees with the exposition which the Imperial Court made with respect to the final Protocol of Sept. 9, 1886, paragraph 3. The appellee answered these arguments by pointing to the fact that at the time of the Berne Convention a whole row of musical instru-

ments with interchangeable disk sheets were well known, and produced several German and American patent copies of prior date.

Upon this appeal this Appellate Court reverses the judgment of the Court below, for the following reasons: The Appellate Court perceives in the train of thought of the judgment of the Imperial Court (Rep. I 287,88) of the 19th of December, 1888, which
659 was a case very similar to the present one, rather an exposition of the law of copyright upon a theoretical basis rather than an interpretation of the existing law of the Empire. At the same time the Appellate Court recognizes that the law of June 11, 1870, did not define what should be understood by the term "mechanical multiplication." In accordance with the spirit of the law the interpretation of these terms should be left to science. But now, when the Appellate Court undertakes to develop this idea, it is only possible to arrive at a narrow, restricted interpretation of these words by means of a logical inversion. It may well be conceded to the Court below that "multiplication" can be spoken of only when a number of objects are produced in such a visible form that by means of the same the idea can be communicated to others. But from this concession it does not follow that the reproduction must be made in the same form in which the original stepped into existence, so that the multiplication of a literary work would have to be in such form that it would compete with the author's multiplication—either those already in existence or those intended to be produced by him later on. The law deems it to be piracy if one without the consent of the author prints lectures which were delivered for the purpose of edification, instruction or entertainment (par. 5b of the law). It is just as immaterial whether the lecture of the author was first reduced to writing by him, as it is whether he intended to have multiplications of his lecture produced by mechanical methods. But even where such intention exists, and where the intellectual production exists in the shape of mechanical multiplications which have been sold by the book trade, there can be piracy in a form which absolutely shuts out the intellectual product from circles to which the form in which the original appeared was absolutely non-accessible.

660 There are expensive editions of printed matter in the form of Editions de Luxe which only persons of means can purchase. If the author desires to permit his intellectual production to appear only in this form, the whole edition may have been sold to the public for which it was intended; so that one can no longer talk of competition, which would happen by means of an unlicensed edition of the publication. Nevertheless, whoever, without the permission of the author, produces a cheap, popular edition upon poor paper and in cheap type, commits an infringement, although such a person thereby makes such a work accessible to other circles for which the expensive work was never intended. Again, a person who makes an intellectual production accessible to blind persons, who cannot read printed books, by means of a mechanical multiplication of raised type, intelligible to the sense of touch, surely has not produced a form which competes with the original; but he has invaded the exclusive right of the author to make a mechanical

multiplication in any form by means of which the intellectual production becomes intelligible to mankind, and in this way has infringed. Whether the raised type consists of the same signs as the readable type, or whether the blind use dots and lines instead of letters, does not change the situation any. For the purpose of the case under consideration—the idea of a mechanical multiplication—this example broadens our ideas, as it proves that a mechanical multiplication can also relate to raised forms which make the production accessible to a part of the public through the intervention of a human sense different from the eye, for which the printed letters are not intended.

Scientific jurisprudence, as well as science, does not confine itself to external matters, but seeks to get at underlying principles.

661 If the law has left to science the ascertainment of what is understood by mechanical multiplication in its relation to a case of piracy, then a sensible treatment of the law requires that such forms of mechanical multiplication as conform to the object, manner and nature of the thing ordinarily produced by means of printing shall also be considered an infringement of printed matter. It is true that notes which are printed in the customary system of staff notation cannot be read like printed matter. A musical expert alone can grasp the composition by reading the notes, and he enjoys perhaps the same or nearly the same pleasure as he would if the song were sung for him or if he heard the music played. But that the notes can be read is not the determining reason for placing musical compositions under the protection against piracy by means of mechanical multiplications. For the great public for whom the sale of these mechanical multiplications is intended the notes must be translated into musical language. Some persons can make this translation for their own personal pleasure, if the composition is written for *one* voice or for *one* musical instrument, and such persons can read and sing the notes or can play the instrument. But compositions arranged for several co-operating instruments or for a chorus such a singer or such a player of a musical instrument can enjoy only, if at the same time he hears others sing it and play it. And the greater part of mankind enjoys music only in this way. Though the Legislature did not deem it legally enforcible and practical to extend the protection of intellectual property to a prohibition against private performance of musical works without the consent of the composer or his legal representative, still it does not follow that the Legislature did not have in view the enjoyment due to the production of the musical composition, when it extended to musical compositions the protection of the

662 copyright law against piracy. The prohibition of piracy is directed against anything which presents the composition to the multitude by means of mechanically made, easily producible and easily distributable copies, in a permanently visual shape, and thereby makes possible and easy the reproduction of the composition at all times. By means of the discovery and perfection of these mechanical multiplications it became possible to embody this intellectual property and make it valuable. If it is this function of the means whereby intellectual property is made accessible and

vendible, then the note sheets of mechanical musical instruments are equivalent to printed notes and therefore they likewise are equivalent to printed sheet music and are protected as intellectual property, and the prohibition against piracy applies to them. Upon this principle of analogy the Court is justified in coming to this conclusion, even though this new form of permanent record for a musical work and the new forms of mechanical multiplications thereof were unknown to the Legislature; and if for that reason words were employed in the statute that would not in terms include reproduction of note sheets for mechanical musical instruments. Judicial decisions apply existing laws to newly arising conditions of life upon the principles of analogy. If a special reasoning might be applied to the new forms which would exclude the application of otherwise analogous legal principles, then the analogy would be excluded; but that is not the case here.

The notes of mechanical musical instruments are used differently from printed notes, in order to make audible the composition of the author. The particular manner in which printed musical compositions are musically utilized is not dealt with by the law. Omitting public performance of musical compositions from consideration, the mere production of the musical composition, even when an infringing copy is used, is not forbidden. The possibility of utilizing the composition in other ways than those sanctioned by the author should be made difficult by prohibiting mechanical multiplications of the musical composition by means of permanently fixed signs or marks without the author's consent, and also the sale of copies thus produced. Therefore, it is really immaterial, in view of the underlying principles of this law, in what manner the notes are made audible and can be made audible.

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Whether the notes of these mechanical musical instruments can be read easily or with difficulty, or whether they can be read at all, is utterly immaterial, for they are translated into music without being read. Therefore, it is also immaterial whether the translation into music can be done without mental effort or whether it is wholly a mechanical labor.

Neither is it decisive that these mechanical musical instruments produce music of a poorer character than a piano forte or other musical instruments played by mankind. Millions of human beings who have no better music, or who cannot obtain the same easily, are gladdened by these mechanical musical instruments, and the compositions of the author are brought near to their musical understanding in this way.

If it were conceivable that on the whole the public to whom musical compositions are transmitted by means of mechanical musical instruments were a wholly different public from that public to whom the music is brought home through the utilization of printed notes, this would not be decisive; for it has already been proven above that new styles of mechanical multiplications are not free from the interdiction against piracy because they bring the intellectual product to a far wider circle of mankind.

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Finally, it is not decisive that the tin mantles of the defendant, reproduced in numbers by mechanical methods,

with their imprinted notes, can be played only on the Clariphon. Without a musical instrument and without the human voice even printed notes are not audible. But whether a notated work, as we have it here, can be played on one or on many musical instruments is immaterial with respect to the question of piracy. If there were no more Clariphons, then the specially manufactured mantle for the same would be a musical piece of metal, but of no importance; but as there are thousands of this kind of instruments and new ones are manufactured and sold continually, therefore, these tin mantles of the defendant, with melodies, are not mere pieces of tin, but can be used by any one of the thousands of Clariphons for the production of the melodies of the plaintiff, and therefore should be interdicted as piratical.

In the judgment (Rep., I, 287/88), hereinbefore several times referred to, of December 19, 1888, the Imperial Court decided that the interchangeable note sheets of mechanical musical instruments produced by means of mechanical multiplications were subject to the prohibition against piracy contained in the law of June 11, 1870, and also that there was nothing in the Berne Convention and the final protocol thereof which prevented the Court applying this prohibition of the law to interchangeable note sheets of mechanical musical instruments.

At the concluding sessions of the Convention it was agreed that the manufacture and sale of instruments which serve for the mechanical reproduction of the music of copyrighted compositions, should not be considered to be infringement. But we must agree with the appellant that even if it must be assumed that musical instruments with exchangeable note sheets were well known to the authors of this agreement at the Convention, exchangeable
665 note sheets were not included in this agreement; but that rather it was intended to include those musical clocks, barrel organs and similar mechanical musical instruments, each of them with but a limited number of melodies, well known at that time. Exchangeable or interchangeable note sheets or enveloping tin mantles with notes impressed thereon are not musical instruments. And the instruments in which these note sheets or mantles are used, when so used in connection with these note sheets and mantels, are, commercially considered, instruments of an entirely different class from musical instruments with fixed, permanent cylinders. By means of the invention of practically arranged note sheets, which can be easily changed, it has become possible to produce innumerable note sheets with different melodies for one and the same instrument and to use each note sheet in an instrument of the same kind and dimensions. Thus the note sheets themselves, as well as the instruments, have been spread broadcast to an extent never theretofore deemed possible. The question here concerns not merely a different mechanism, but an instrument of an entirely different nature. Formerly the cylinder was a part of the individual instrument; now the note sheet is changeable. Therefore, one cannot look upon these marketable tin mantles, capable of being used in

every Clariphon, as a part of a single mechanical musical instrument exempt under the Berne Convention.

The Imperial Court reaffirms in every respect the reasons heretofore expressed by it in its former opinion (Rep. I 287/88) of Dec. 19, 1888, and it fails to find in the opinion of the Musical Experts Association of Weimar, or in the opinion of the two Courts below, or in the briefs and arguments of the appellee, any reason for deviating on principle from its former decision.

866 *The Decision in "Entscheidungen des Reichsgerichts, Civil Sachen," Vol. XXII, p. 174.*

Decision Rendered Dec. 19, 1888, No. 35.

Can infringement of a copyright be committed by the production of perforated disks intended to make audible a musical composition by imposing the same upon a tone-producing instrument? What is meant in paragraph 3 of the final Protocol of the Berne Convention of Sept. 9, 1886, by "instruments which serve to reproduce mechanically musical compositions?"

The defendant is engaged in the manufacture of mechanical musical instruments and deals in so-called Herophons. In this instrument the sounds are produced by the conjoint action of a perforated disk, a so-called note disk and a barrel organ by means of levers. The valves for the various tones, made out of cardboard, are opened and closed whenever the levers, through the proper rotation, are brought opposite the perforations found in the disk. The perforations of the disk, which has a separate existence and which is super-imposed upon the barrel organ for the production of a distinct piece of music, are cut into the disk in such a way that when the lever mechanism rotates against the disk the points of the levers operate in the way required by the succession of tones and the duration of tones of the particular piece of music. The defendant sells such disks or plates with its barrel organs, but also separately, and among them are found disks which are specially made for certain musical compositions of the plaintiff. The plaintiff has not given his consent to this, and contends that his compositions are infringed. The defendant contends that its actions are proper, because the disks
667 are not notes, which are graphic representations of the musical thought, for the purpose of making communications in this way to others, but they are to be looked at as integral mechanical parts of an automatic musical instrument. In addition to this the defendant argues, from paragraph 3 of the final Protocol of the Berne Convention, concerning the creation of an international union for the protection of works of literature and art, of Sept. 9, 1886, that the reproduction of musical compositions by means of automatic musical instruments could not be looked upon as an infringement by the members of the union in their respective countries. After obtaining an opinion from the Royal Musical Association of Experts at Berlin, which held that an infringement existed, this suit,

in which the prayer for judgment demanded a decision from the Court to the effect that the disks in question lawfully reproduced the musical composition, was dismissed.

An appeal from this decision was also dismissed.

The Opinion of the Reichsgericht.

The lower Court, following the opinion of the Musical Experts Association, held the perforated cardboard disks made for the reproduction of musical compositions of the plaintiff by means of the Herophon to be improper reproductions of these compositions in the sense of paragraph 45 of the Federal Law of June 11, 1870, because the musical expert familiar with the mechanism of the Herophon would be able to translate these disks into notes and be able to play therefrom the melodies on the piano.

Not intending to controvert these findings from the evidence and the legal conclusions drawn therefrom, it is nevertheless a question whether a similar conclusion cannot be arrived at without holding these cardboard disks to be notes, but an infringement of the
668 copyright in the original musical composition just in the direction in which this infringement is specially brought about by means of these cardboard disks. Evidently, in the first place, the detriment to the author by means of the publication of these cardboard disks lies not in the use of these cardboard disks as notes for the purpose of reading the melody or playing the same upon other instruments than the Herophon, but it consists in this, that by means of these disks the composition can be made audible to every one, without the exercise of musical knowledge, upon the Herophon, which can be bought at a very reasonable price and takes up very little room; so that because of the ready accessibility of these means of reproduction in a large circle and from the standpoint of the æsthetic musical taste a rather lower kind of reproduction, which is due to the means whereby the reproduction is made possible, the rapid destruction of the composition takes place, because the better public will be quickly satiated therewith, and in this way the sale of the musical composition for reproduction upon instruments, which makes the notes audible by means of the application of manual skill, is lessened.

The question which the lower Court and the experts have not decided is this, whether a graphic production of a literary work, in order that it may be looked upon as an illegal multiplication in the sense of the copyright law, must itself be a literary work, taking this idea in its widest range, that is to say, whether it must be something directed to the visual or tactual sense of the observer, which is first translated into an observable representation of the intellectual creation through the operation of his intellect; or whether, within the meaning of this term (that is, the graphic reproduction of the intellectual or literary work) a production of an article may be included which, without requiring this mental operation, produces the original
669 composition as a reproduction automatically or by means of continued or manual operations, provided always that the

article is mechanically produced by means of a process which enables the reproduction of a large number of copies.

The reason for this provision is as follows. The Federal Law of June 11, 1870, limits the reproduction of literary works, as to which the author shall be protected, only in this respect, that a "mechanical multiplication" of the protected work must take place (see paragraphs 1, 4 and 45). Only a mechanical multiplication can be an infringement, as this is specially stated in paragraph 4, Section 1, and repeated in paragraph 5, by placing paragraph 4 in parenthesis. This is merely the designation of the legal technical idea, not the designation of the method or style of reproduction.

The term "literary work" for the composition to be protected does not mean that it must be graphically represented or that it should be graphically represented; only this, that it must be capable of being graphically communicable; that is to say, that it must have the quality of being a punishable article. As to that there cannot be any question (see paragraph 5 *a*, *b*). In this function of being graphically representable in an easily producible multiplicity of copies consists the mercantile value of literary creations, and it is because of this that protection is given to literary property. But it does not follow from this that a violation of this right must be in the same form as the original, which form in the legitimate reproduction on the part of the author for publication purposes was particularly kept in view, and which was the basis for the recognition of the copyright. It is very evident that the profit obtained from the legitimate reproduction of this specially considered form can be materially interfered with through an illegitimate reproduction in another form. Such a material interference the law considers every reproduction which is the result of some process which enables the production of many similar copies. The same uniform multiplication in any form is that against which the law desires to protect the author, because this in reality, in whatever form it may be done, is nevertheless adapted to interfere with the exploitation of the right of the author of multiplying his work in its principal form, that of multiplying by means of printing.

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There is no reason *on* principle why only such an infringement should be unseemly as is produced by signs on the basis of which it is first necessary for the observer to bring the work to his intellect through the application of his own mental work, while, on the other hand, such infringement should be permissible if this mental work is saved for him because of the special corporeal representation of the musical thought, and a purely mechanical operation suffices for the production of the work.

(See Kohler, Rights of Authors, in Ihering's Annual Reports for Dogmatik, Book 18, N. F. VI, p. 360, specially printed in a separate article, p. 231.)

In the conception of what constitutes a literary production it does not follow that that which cannot be comprehended by the process of reading should not be a reproduction of a literary product. It would be a pity to designate reading as the only means by which a

literary production shall operate upon the mind. It is the language by means of which the literary production shall and does make the mental impression, and it is the comprehension of words by means of prescribed symbols through printing or writing which makes it possible for the observer, according to his lessor or greater familiarity therewith, to call to his mind the thoughts corresponding to the words, and thereby the totality of the mental creation, either
671 by speaking the words, or by an omission so to do. If there were mechanism by means of which, without reading, one could arbitrarily make the language of a poem audible, this would be a reproduction of the poem. Whether, as inexperienced people do, by reading aloud, so as to hear the spoken words and thereby obtain the conception thereby represented, or whether through the function of a mechanical operation, the word-sounds become audible, can make no difference in the conception of the process of reproduction. But that which would be good argument in the case of a word language must also be good with respect to a musical language, only that in view of the larger circle of persons unfamiliar with the latter, the impression by means of the word-language is much greater.

Everything, therefore, depends on this, whether the thing which produces the sounding of the tone creation is a mechanical reproduction of the tone or music creation. The words "mechanical multiplication" must be understood to imply a process by means of which a number of copies can be produced at the same time, or one after the other, by means of devices for the production of many copies, so that in the production of later copies it is not necessary to repeat the entire process from the beginning.

(See Mandry, Copyright Law, p. 54; Dambach, the Law Concerning Copyright, pp. 40-41.)

For this reason, in view of the provisions of the German requirements concerning mechanical reproduction, one would go too far if, in accordance with the French judicature and doctrines as they were in existence under the law of 16/25 May, 1866 (see Dolloz, 1866, p. 49), he would find in every automatic music box an infringement of the copyright of every protected musical composition for the sounding of which such instruments were intended. Even if
672 the cylinder studded with pins, or the cylinder of musical clocks, music boxes, musical organs, etc., in respect to the distancing of the pins, which put into operation the reeds in proper succession and with proper tone duration as required by the musical composition, had been produced by a mechanical procedure corresponding to the heretofore stated requirements, nevertheless one would always have to ask the question, whether, as is usual in automatic music boxes, the cylinder or the roll placed in the box constitutes with it an integral work, which, as a whole, representing the mercantile article, in its totality was produced by means of the above designated process, for the purpose of representing a mechanical reproduction of the protected musical composition.

But all this does not come into consideration, in view of the cardboard disks here under consideration. They are something existing

for themselves, although intended to operate upon the tone-producer contained in the Herophon, with respect to the manner of their application for the production of this result as well as an object of sale. They are only laid upon the tone-producing box and they are exchangeable. They can be used for every Herophon of similar dimensions. If they are injured, the tone-producing instrument in the box is wholly unaffected thereby. In place of the injured disks new ones are produced. The cardboard disks can be the subjects of sale by themselves alone and as such have their price. The tone-producing instrument also exists for itself and can be brought to sound by itself just like a piano-forte, upon which one arbitrarily strikes the keys. The superimposed cardboard disk regulates, by means of the holes therein contained, the succession of tones in artistic manner for the reproduction of the specific piece of music.

673 These cardboard disks, however, are produced by way of a mechanical reproduction in the sense in which these words have heretofore been defined, because for their production there exists a metallic plate for the production of holes, which perforates the individual cardboard copies by means of a machine that does such work. Whether various disks are perforated at the same time, or one after the other, is immaterial. The application of paragraphs 45 and 4 of the Laws of June 11, 1870, to these particular disks can therefore not be very troublesome, if one only takes this law into consideration.

Of course the question arises whether this conception of the law can still be had in view of the convention concerning the International Union for the Protection of Literary Works and Works of Art of the 9th of September, 1886—the so called Berne Convention—in view of the relationship of Germany to the other States which have joined the same. This Convention, after it was introduced into the German Parliament, was accepted by the same and was published. In accordance with Article XXI of the Convention the agreement should have been ratified—that is, documents as to ratification should have been exchanged, at the latest, within a year from September 9, 1886, at Berne, while the agreement, according to Article XX, should become operative three months after the exchange of the documents of ratification.

According to paragraph 7 of the concluding protocol of September 9, 1886, each party to the agreement, in view of the expected interchange of the ratification articles, should deliver but one document, which, together with those of the other countries, should be deposited in the archives of the Swiss Government. The publication in the Federal Law Journal contains, at the end of the agreement and at the end of the concluding protocol, the following note:

674 "The foregoing agreement, with amendatory article and the foregoing final protocol, have been ratified by the parties to this treaty, with the exception of Liberia, and the ratification, according to paragraph 7 of the final protocol, have been deposited in the archives of the Swiss Government at Berne on September 5, 1887."

According to this, this agreement went into operation during the progress of the foregoing litigation and has therefore become legally

operative, if no technical objection is raised as to the manner in which such treaties are usually published.

Now, paragraph 3 of the concluding protocol enacts:

Il es entendu, que la fabrication et la vente des instruments servant à reproduire mècaniquement des airs de musique empruntés au domaine privé ne sont pas considérées comme constituánt le fait de contre façon musicale.	It has been agreed that the manufacture and sale of instruments which serve for the mechanical reproduction of musical compositions taken from protected copyrighted works shall not be considered as infringements of musical compositions.

On the one hand, of course, the stand to be taken by Germany with respect to this Convention is affected by the manner in which this Convention may be treated by the other parties to the agreement, and it is especially provided by Article XX that each one of the parties to the agreement may give notice of cancellation. At the same time it stands to reason that this convention should receive an authentic interpretation, in view of the law of June 11, 1870. Yet it would be singular and detrimental to our industry, and an advantage to foreigners, if in Germany the sale of such instruments would be permitted to citizens of other countries belonging to
675 this Convention (and as in accordance with Article XVIII of the Convention every country which grants in its territory the protection of the subject matter of the laws involved in this Convention, the right of joining the Convention was left open) (the subject matter of this convention, therefore, shall apparently develop into a law of the world), and that the whole world, only not subjects of the German Empire, would have the right to sell these instruments.

Nevertheless from the foregoing we cannot come to the conclusion that these Herophon disks were included within the "instruments" referred to in paragraph 3 of the final protocol. Neither will one go far out of the way if he ascribes such an interpretation of this convention to the agitation of Switzerland, which, in the interest of protecting its large musical clock and music-box industry in the cantons of Vaud and Geneva against confiscation of its product in foreign countries, upon the occasion of making commercial treaties, induced France to pass the law of 16/25 May, 1866, and induced Italy to enter into a convention similar to the last named law on July 22, 1868. In the law of 16/25 May, 1866, the objects which should not be treated as copyright infringements in the case of manufacture and sale were referred to in this paragraph 3 of the final protocol as "instruments servant à reproduire mécaniquement."

In the draft of the Swiss law concerning copyright in the year 1883 the instruments which should be permitted to use musical compositions were designated as "music boxes or similar musical instruments." The German text of this article XI, paragraph 11, of the law of April 23, 1883, does indeed use this simple expression "music boxes," but the corresponding French text says "boites a

musique"; and with respect to the German text it is remarked
676 by the interpreters of that law that "music works" mean as much as "music boxes or similar musical instruments."

(See v. Orelli, The Swiss National Law Concerning Copyrights for Works of Literature and Art, p. 89.)

In the programme which the Swiss Parliament laid before the International Conference of the 8th of September, 1894, in Berne, the proposition with respect to an agreement concerning mechanical musical instruments read, in the final protocol, as follows:

"Définir, que les mots, 'arrangements de musique' ne s'appliquent pas aux morceaux reproduits par des instruments automatiques tel que pianos élestriques, boites à musique, orgues de Barbarie, etc."

The terms, however, found in the text of paragraph 3 on the part of Conference are those which correspond closely to the words of the heretofore referred to French law and to the Convention entered into between Switzerland and France, which uses practically the same phraseology under date of February 23, 1882 (v. Orelli a. a. O. p. 149, *et seq.*), with certain exceptions, in order to leave undecided the question whether the public representation of protected compositions should be permitted by means of such instruments.

This prior history seems to show that by the terms "instruments which may be freely used upon copyrighted musical compositions" are to be understood only those in which the tone-producer and the mechanism by means of which the same can be sounded in a manner corresponding to the musical composition to be reproduced, shall be so closely connected one with the other that both together constitute the musical work (music box) and the subject of commerce. This corresponds to the heretofore and usual conception of a
677 "musical work" (music box) and likewise to fundamental ideas of fair, and for that reason correct, adjudication between the interests of literary copyright and trade. For as soon as the injury of any part of the mechanism makes the entire work valueless for commerce, then the interference which happens to the legitimate exploitation of a musical composition is much smaller than in the case where the device which, with respect to the succession of tones and the duration of tones, corresponds to the musical composition, does not require an integral structural connection with the tone-producer, and which can be successfully utilized by every tone-producer of a similar kind and for that reason can be the subject matter of commerce. Thus with such devices it will always be found that the expert in music can recognize from these devices themselves, without particular difficulty, the musical thought, and can bring the same to expression upon other instruments, so that they (the instruments) can operate in a manner similar to musical notes.

678 *Voigtlander Urheber und Verlagsrecht, Published* 1901 *by Rossberg & Berger of Leipzig.*

Page 37. The law relating to copyright of literary works and of works relating to the science of music, passed the 19th of June, 1901.

ARTICLE I.

Matters taken for granted in the application of this law.

I.

According to the provisions of this law there will be protected:

1. The authors of literary works and such lectures or speeches as serve the purposes of edification, education or entertainment.

2. The authors of works connected with the science of music.

3. The authors of likenesses or pictures of scientific or technical nature, which as to their purposes may not be considered pictorial representations of the fine arts. In this class of likenesses plastic representations are included.

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ARTICLE II.

Rights of the Author.

II.

The author has the exclusive right to multiply his works and to publish the same commercially; this exclusive right does not include loaning. The author furthermore has the sole right of com-
679 municating, so long as the material contents of the work have not been publicly communicated.

The copyright as to a dramatic work or as to a work of the musical art includes the exclusive privilege of producing such work publicly.

The author of a literary work or of a lecture has, as long as that work has not been published, the exclusive privilege of publicly communicating the same by word of mouth.

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22.

If a published musical composition is transferred to such disks, plates, cylinders, bands and similar parts of instruments, as serve for the mechanical reproduction of musical compositions, then the multiplication thereof is permitted. This provision applies also to interchangeable parts in so far as they cannot be used in connection with instruments which reproduce the musical composition with respect to dynamic power and duration of tone and with respect to tempo in a manner similar to a personal performance.

I.—*Facts and History.*

While the copyright law of 1901 throughout its enactments strengthens the protection awarded to copyrights, in this paragraph 22 it violates all copyright principles in that it makes free for mechanical musical instruments the musical composition in material respects, not only for private use, but also for public use (in taverns, etc.).

This whole matter has an interesting prior history. When, in September, 1884, the provisions of the Berne Convention were preliminarily discussed in the Confederate Palace at Berne, as Dambach tells the story, the statesmen there assembled received con-
680 siderable enjoyment from the elegant exhibition of Heller's music boxes. With such an agreeable animation it was not very difficult for Switzerland to obtain paragraph 3 of the concluding protocol of the Convention in favor of its music box industry, which makes free to mechanical musical instruments the use of all melodies. At that time, however, one knew only music works with cylinders and pins, therefore with a very limited range of melodies. Shortly afterwards there came into prominence instruments with interchangeable disks and strips with an unlimited number of melodies, the production of which, especially in and near Leipsic, assumed, as was well known, enormous proportions. The manufacturers of musical instruments attempted to use these melodies also for their disks without consideration, but very soon (1888 and later) were compelled, through judgments of the Imperial Court, to make their peace with the authors. (See Decisions of the Imperial German Court in Civil Matters, 13, p. 324; 17, p. 174; 27, p. 60; 29, p. 193; 35, p. 64; and in Penal Matters, 32, p. 41.)

The objections made to the law as laid down by the foregoing decisions in the Imperial Court were:

"That it was not wise to adhere in the proposed new law to this differentiation in musical instruments with or without interchangeable parts; there was no reason based upon copyright principles to differentiate the instruments of the one kind from the other; besides this, it would lead to uncertainty in the law if the decision would depend upon the interchangeability of the mechanism—the boundary line would often be very doubtful, in view of the differences of the numerous and new systems of construction."

681 After calling attention to the wishes of the music box manufacturers, the paper continues:

"It is not enough for the Legislature to decide this question without taking into consideration the various relations affected thereby, and to decide the same with a consistent regard for the principles of the copyright law; but it must weigh the economic interests of the composer, of the publishers and those dependent on this business, on the one hand, against the interests of the manufacturers and of the workmen engaged therein, on the other hand. Mechanical musical instruments are produced in Germany in factories and also in the workmen's house to a great extent—more than twelve thousand workmen are employed in this industry. The sale of these productions

is largely by means of export to other countries. Competition in the world markets is made much more difficult for the German industries because of the fact that the production of similar instruments in neighboring countries is increasing materially. In addition to this, however, inasmuch as in these countries, partly because of special legislation, partly because of the interpretation of the laws, the use of copyrighted compositions for mechanical musical instruments, without consideration, is open and free to the industry, the danger is very imminent that if the German industry does not receive similar relief, its sales to foreign countries will be materially decreased. At the same time the possibility of competing successfully in Germany is open to the foreign industry. The exchangeable parts pro-
682 duced in foreign countries, even if they are produced contrary to the provisions of the German law, can nevertheless be imported and distributed in Germany without the possibility of preventing the same effectively by methods available to the party owning the copyright. For neither at the Custom House, nor in the use of these instruments, is it possible to ascertain whether a protected musical composition is being used without the consent of the party entitled thereto."

Against these statements both composers and music publishers, in full accord, made the most positive objection. At the very least, they replied, manufacturers should be compelled to pay a small tribute, if the use of musical compositions was made free for them.

There were long debates in parliament. Of interest, among others, were the following explanations by the representatives of the Government:

"Because of the binding force of the judicial interpretations given in the declaration contained in the final protocol of the Berne Convention, the competition of the home industry with the foreign was made very much more difficult, both at home and abroad. For in foreign countries the translation of musical compositions into this kind of devices was permissible, as, for instance, in accordance with paragraph 36 of the Austro-Hungarian copyright law of 1895; according to the decisions in France and in Switzerland; and in England, according to a proposed law introduced in July, 1900, containing the same provisions. Already in the year 1896, during the preparations preceding the conferences at the Paris Conference,
683 the Imperial Government had it in mind to bring about a change due to the unfavorable German judicial conditions, by means of international agreements. But as most of the States represented at that conference were satisfied with existing conditions, all efforts to bring about a change were in vain. For this reason help must be found in the way of domestic legislation."

The Secretary of State said further:

"In all the civilized countries surrounding the German Empire on the south and west judicial conditions exist similar to those which the proposed law seeks to bring about for Germany. It was not to be assumed that this condition of the law would be changed as long as France would not take the initiative. But one could hardly expect that France would do this as long as Germany should maintain the

present existing condition of the law. The law proposed by the Government sought to obtain under existing conditions, for the advantage of Germany, similar manufacturing conditions in all civilized countries. If this proposed law should be rejected, it would surely be welcomed abroad. If it should be adopted, an advance would be made in bringing about a more extended and harmonious protection of authors with respect to mechanical musical instruments in all countries belonging to the Berne Union. This was an important point justifying the conduct of the Government, which did not intend permanently to injure the interests of authors for the sole benefit of manufacturers. These interests, on the contrary, would be materially advanced if the future be taken into consideration."

684 These reasons commended themselves to the Cabinet, and it concluded to propose as a resolution in the Imperial Congress the following:

"*Resolved:* To request the Imperial Chancellor as soon as possible to bring about conferences with those countries which were members of the Berne Convention of Sept. 9, 1886, concerning the formation of an international union for the protection of works of literature and art, with a view to extend the copyright protection, so as to prohibit the transfer of musical compositions to instruments which serve to reproduce them mechanically, without the consent of the author."

This resolution was adopted by the Imperial Congress.

The voluminous and very thorough debates can be read in KB., pp. 36-48; also Sten. II, pp. 2196-2208.

2. *The Existing Law.* It is permitted without the consent of the author to transfer a published work of music upon such disks, plates, cylinders, strips, etc., as serve for the mechanical reproduction of musical compositions. In opposition to this the law puts instruments which reproduce musical pieces in the manner of a personal performance (paragraph 22, sentence 2). This is aimed at instruments like the Pianola, the performance of which can hardly be differentiated from the performance of a player highly skilled in the technique, or at most only by connoisseurs of the very finest points. The Imperial Parliament therefore declined to seek the differentiating marks in external characteristics, but made the musical impression the decisive test. It is true that it thus provides that perfected instruments are taxed, and that the less perfect are not taxed, and in this way puts a premium upon the less valuable.

685 *The Law of Copyright, by Thomas Edward Scrutton, 4th Edition, Published London, 1903, by William Clowes & Son, Ltd.*

(P. 250, 251.)

5 & 6 Vict., c. 45.

An Act to Amend the Law of Copyright.

(1st July, 1842.)

Whereas, it is expedient to amend the Law relating to Copyright, and to afford greater Encouragement to the Production of literary Works of lasting Benefit to the World: Be it enacted, That from the passing of this Act an Act (8 Anne, c. 19), and also an Act (41 Geo. 3, c. 107), and also an Act (54 Geo. 3, c. 156), be and the same are hereby repealed.

II. In the construction of this Act the word "Book" shall be construed to mean and include every Volume, Part or Division of a Volume, Pamphlet, Sheet of Letterpress, Sheet of Music, Map, Chart, or Plan separately published; the Words "Dramatic Piece" shall be construed to mean and include every Tragedy, Comedy, Play, Opera, Farce, or other scenic, musical, or dramatic Entertainment; the Word "Copyright" shall be construed to mean the sole and exclusive Liberty of printing or other wise multiplying Copies of any Subject to which the said Word is herein applied; the Words "personal Representative" shall be construed to mean and include every Executor, Administrator, and next of Kin entitled to Administration; the Word "Assigns" shall be construed to mean and include every Person in whom the Interest of an author in Copyright shall be vested, whether derived from such Author before or after the Publica-
686 tion of any Book, and whether acquired by Sale, Gift, Bequest, or by Operation of Law, or otherwise; the Words "*British* Dominions" shall be construed to mean and include all parts of the United Kingdom of *Great Britain* and *Ireland*, the Islands of *Jersey* and *Guernsey*, all parts of the *East* and *West Indies*, and all the Colonies, Settlements, and Possessions of the Crown which now are or hereafter may be acquired.

(P. 254.)

XV. If any Person shall, in any Part of the *British* Dominions, print or cause to be printed, either for Sale or Exportation, any Book in which there shall be subsisting Copyright, without the Consent in Writing of the Proprietor thereof, or shall import for Sale or Hire any such Book so having been unlawfully printed from Parts beyond the sea, or knowing Such Book to have been so unlawfully printed or Imported, shall sell, publish, or expose to Sale or Hire, or cause to be sold, published or exposed to Sale or Hire, or shall have in his Possession, for Sale or Hire, any such Book so unlawfully printed

or imported, without such Consent as aforesaid, such Offender shall be liable to a special Action on the Case at the Suit of the Proprietor of such Copyright, to be brought in any Court of Record in that Part of the *British* Dominions in which the Offense shall be committed; Provided always, that in *Scotland* such Offender shall be liable to an Action in the Court of Session in *Scotland*, which shall and may be brought and prosecuted in the same Manner in which any other Action of Damages to the Like Amount may be brought and prosecuted there.

(P. 310, 311.)

2 Edw. VII, c. 15.

687 An Act to Amend the Law Relating to Musical Copyright.

(22nd July, 1902.)

Be it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same as follows:

1. A court of summary jurisdiction, upon the application of the owner of the copyright in any musical work, may act as follows: If satisfied by evidence that there is reasonable ground for believing that pirated copies of such musical work are being hawked, carried about, sold, or offered for sale, may, by order, authorize a constable to seize such copies without warrant and to bring them before the court, and the court, on proof that the copies are pirated, may order them to be destroyed or to be delivered up to the owner of the copyright if he makes application for that delivery.

2. If any person shall hawk, carry about, sell, or offer for sale any pirated copy of any musical work, every such pirated copy may be seized by any constable without warrant, on the request in writing of the apparent owner of the copyright in such work, or of his agent thereto authorized in writing, and at the risk of such owner.

On seizure of any such copies, they shall be conveyed by such constable before a court of summary jurisdiction, and, on proof that they are infringements of copyright, shall be forfeited or destroyed, or otherwise dealt with as the Court may think fit.

3. "Musical copyright" means the exclusive right of the
688 owner of such copyright under the Copyright Acts in force for the time being to do or to authorize another person to do all or any of the following things in respect of a musical work:

(1) To make copies by writing or otherwise of such musical work.

(2) To abridge such musical work.

(3) To make any new adaptation, arrangement or setting of such musical work, or of the melody thereof, in any notation or system.

"Musical work" means any combination of melody and harmony, or either of them, printed, reduced to writing, or otherwise graphically produced or reproduced.

"Pirated musical work" means any musical work written, printed, or otherwise reproduced, without the consent lawfully given by the owner of the copyright in such musical work.

4. This Act may be cited as the Musical (Summary Proceedings) Copyright Act, 1902, and shall come into operation on the first day of October, one thousand nine hundred and two, and shall apply only to the United Kingdom.

689 Circuit Court of the United States, Southern District of New York. In Equity.

No. 8126.

"Little Cotton Dolly."

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

No. 8127.

"Kentucky Babe Schottische."

SAME
vs.
SAME.

UNITED STATES OF AMERICA,
Northern District of Illinois, County of Cook, ss:

Annette E. Crocker, being duly sworn, deposes and says that she is a translator by occupation, having an office at No. 1532 Monadnock Block, City of Chicago, County of Cook and State of Illinois; that she is thoroughly familiar with the French language, and able to translate therefrom into English, and that the translations hereto annexed of extracts of the laws of the Republic of France, of July 19, 1793, and May 16, 1866, set forth respectively in Vol. 1255, page 1, and Vol. 1388, page 649 of the pamphlet entitled "Depot des Lois," published by Chez Muzard et Ebin, Paris, and of the Certificates of Paul Bogelot and of the Mayor of the First Arrondissement of Paris, on each of said pamphlets inscribed, are correct.

Deponent further says that the annexed translations of two decisions of the Civil Tribunal of the Seine (France), rendered in the case of Society of Authors, Editors and Composers of Music *v.* Phonograph Society *et al.*, and in the case of Alfieri *et al. v.* The Gramophone Company, set forth in the journal entitled
690 "Gazett du Palais," issues of March 31, 1903, and April 18-21, 1903, respectively, and of the Certificates of Paul Bogelot and the Mayor of the First Arrondissement of Paris on each of the copies of said journal inscribed, are likewise correct.

Deponent further says that the annexed translation of a Certificate of Paul Bogelot, an attorney of the Court of Appeals of Paris, dated June 23, 1903, with respect to the extracts of the laws and the copies of the decisions hereinabove mentioned, is likewise correct.

Further deponent saith not.

ANNETTE E. CROCKER.

Sworn to before me this 28th day of November, 1904.
[SEAL.] FRED. G. FISCHER,
Notary Public.

691 Attest:

38 RUE DU LOUVRE, PARIS, *June* 23, 1903.

I, the undersigned, Paul Edouard Bogelot, attorney before the Court of Appeals in Paris, and living at No. 38 Rue du Louvre, in said city, do certify and affirm that the five documents enumerated below, all provided with my notation and signature, are true and in conformity with the facts.

The copies of the judgments of March 6, 1903 (case of The Society of Authors, Publishers and Composers of Music *v.* The Phonograph Society *et al.*), and of July 23, 1902 (Alfieri *et al. v.* The Gramophone Company), published, the first in "La Gazette du Palais," on March 31, 1903, and the second in the same legal journal for April 18, 19, 20 and 21 are indeed the identical reproduction of the decisions rendered by the Tribunal at a public session, and as recorded in the archives of the clerk's office of the Civil Tribunal of the Seine.

The two laws of July 19, 1793, and of May 16, 1866, appearing in the Legal Bulletin, are indeed those cited in the said judicial decisions, and are both still in force.

The typewritten reproduction of articles 425, 426, 427, 428 and 429 of the Penal Code is the exact textual copy of these articles as they appear in our Penal Code; they are still in force, never having been abrogated in any manner, and are just the articles applicable to the case.

PAUL BOGELOT,
Attorney Before the Court of Appeals in Paris,
38 *Rue du Louvre.*

[Seal of the Mayoralty and signature of the Mayor, 1st Arrondissement, Paris.]

Seen by the Mayor of the 1st Arrondissement of Paris, for the legalization of the signature of M. Paul Bogelot.

A. JOLLY, *Mayor.*

692 Attest:

I, the undersigned, Paul Bogelot, an attorney of the Court of Appeals, Paris, do hereby certify that the law hereinbelow set forth, is indeed the one cited in the judgment of March 6, 1903, published in the legal journal "La Gazette du Palais," issue of March 31, 1903. The said law still remains in force, and controls at the

present time the artistic and literary ownership in the French Republic.

PAUL BOGELOT,
38 *Rue du Louvre, Paris, June* 23, 1903.

[Seal of the Mayoralty, 1st Arrondissement, Paris, French Republic.]

Seen by the Mayor of the 1st Arrondissement of Paris, for legalization of the signature of M. Paul Bogelot.

A. JOLLY, *Mayor.*

Decree of the National Convention of July 19, 1793, *in the Second Year of the French Republic.*

Relating to the rights of ownership of Authors of Writings of all kinds, of Composers of Music, of Painters and Designers.

The National Convention, after having heard the report of its committee on public instruction, decrees as follows:

Art. 1. The authors of writings of all kinds, composers of music, painters and designers who cause to be engraved pictures or designs, shall enjoy during their entire life the exclusive right of selling, having sold, distributing their works within the territory of the Republic, and of transferring such right in whole or in part.

693 Attest:

I, the undersigned, Paul Bogelot, an attorney of the Court of Appeals, Paris, do hereby certify that the law of May 16, 1866, as set forth below, is indeed the one cited in the judgment of March 6, 1903, and published in the legal journal "La Gazette du Palais," issue of March 31, 1903. The said law still remains in force.

PAUL BOGELOT,
38 *Rue du Louvre, Paris, June* 23, 1903.

[Seal of the Mayoralty, 1st Arrondissement, Paris, French Republic.]

Seen by the Mayor of the 1st Arrondissement of Paris, for legalization of the signature of M. Paul Bogelot.

A. JOLLY, *Mayor.*

No. 14,220.—*Law Relating to Mechanical Musical Instruments of May* 16, 1866.

Napoleon, by the Grace of God and the national will, Emperor of the French, to all present and to come, Greetings:

We have sanctioned and do hereby sanction, have promulgate- and do hereby promulgate the following Law. (Extract from the minutes of the "Corps Legislatif.")

The "Corps Legislatif" has adopted the law whose provisions are as follows:

Article 1. The manufacture and sale of instruments serving to produce mechanically musical airs which are private property do not constitute the act of musical infringement prohibited and to be punished by the law of July 19, 1793, together with articles 425 and *seq.* of the Penal Code.

Resolution passed in public session at Paris, July 4, 1865.

694 Attest:

I, the undersigned, Paul Bogelot, an attorney before the Court of Appeals, Paris, do certify that the text of the decision here below reproduced, is in accordance with the judgment of March 6, 1903, the same having been in no way changed.

PAUL BOGELOT,
38 *Rue du Louvre, Paris, March* 31, 1903.

[Seal of the Mayoralty, 1st Arrondissement, Paris, French Republic.]

Seen by the Mayor of the 1st Arrondissement of Paris, for legalization of the signature of M. Paul Bogelot.

A. JOLLY, *Mayor.*

Civil Tribunal of the Seine.

Session of March 6, 1903, M. Monier Presiding.

Society of Authors, Publishers and Composers of Music *v.* The Society of Phonographs *et al.*

The Tribunal:

Although the law of July 19, 1793, assured to authors and composers of music the exclusive right to publish their works, the law of May 16, 1866, has placed upon the same a restriction by declaring that the manufacture and sale of instruments serving to reproduce mechanically musical airs which are private property, does not constitute the active musical infringement forbidden by the law of July 19, 1793, together with Article 425 *et seq.* of the Penal Code.

The question submitted to this Tribunal is to ascertain whether the cylinders and disks inscribed for the use of phonographs
695 or gramophones, constitute a musical infringement within the terms of the law, or a reproduction of musical airs arranged and prepared for the exclusive use of mechanical instruments.

For the purpose of proving that there is infringement, the appellants submit that the cylinders or disks represent a musical edition *sui generis,* distinct from the instrument to which it must be adapted, being sold separate from the latter and consequently permitting those who purchase the same to dispense with printed or engraved editions sold by the authors or their assigns. They contend that the law of 1866, which is but a special law and intended as a manifest attack upon the rights of authors, should be understood and interpreted in an eminently restricted sense; that it was

only intended to provide by request of Switzerland, at the time of renewal of a commercial treaty, for the introduction, free of duty, into French territory, of the only mechanical instruments then known—music boxes, carillons, serinettes and "orgues de Barbarie" (hand-organs), of which that country had at the time the almost exclusive manufacture; that no other instruments, whether more or less similar, except those specifically provided for by said law should benefit by its exceptional provisions in derogation of natural rights; alleging finally that this law, in excepting these instruments from the application of the law of 1793, could have had in view at any rate, only musical airs reproduced by mechanical means, and that, under no hypothesis can it be extended to include words and the human voice, and songs and discourses, of which the phonographic disks furnish an accurate and complete reproduction.

As music has for its purpose the free exercise and gratification of one of our senses, according to certain laws of harmony, and as a musical work exists only for the ear and by the sound, for the purpose of enabling a new performance of the same, conventional
696 signs have been adopted, constituting a notation which, although very elementary at first has been perfected step by step in response to the progress of the musical art.

The employment of these conventional signs gives to the author the power to materialize his conceptions, to reveal his thoughts, and to deliver to others his inspiration in such a manner that after him, and without his intervention, every performer can in his turn reproduce the work by translating into sound the written idea of the musical language.

The reproduction in larger or smaller numbers of a work which is the expression of the thought of the author, for the purpose of deriving profit from his work through its circulation among the public and by being placed on sale, constitutes the publication whose exclusive exploitation is reserved to said author. This reproduction is permitted to him alone, whatever may be the mode employed for that purpose—printing, engraving in low or high relief, figures, autographs, copies, or whatever may be the signs by which this translation of the work is effected.

In a word, there is publication when the work is communicated to the public by any means whatsoever permitting the same to be read, to be interpreted and executed.

The phonographic disks considered by themselves do not present any of the characters of the publication thus understood and defined. The transcription of the works upon the surface of these disks is produced by vibrations of air during the execution of the same, according to the effects produced by the voice, the music or the song, these being translated by virtue of a natural physical law into imperceptible depressions corresponding to the successive impressions received from a vibratory plate, and made up of indentations almost invisible to the eye, infinite in their variety and their inex-
697 tricable combinations, and more or less accentuated or drawn out according to the intensity of the voice or of the sound at the moment when the impression is received.

This transcription thus translated into a multitude of concentric grooves with an infinity of graphic details that can be seen with clearness only by the aid of powerful instruments, presents itself to the eye and to the mind in a confusion defying all method and all analysis. The examination and study of these results made by specialists in matters phonetic and by means of special instruments, does not enable them to follow any phrase whatsoever, musical or spoken, still less to re-establish all or even a part of the work recorded. In the present state of discovery and of science it may be affirmed without fear of contradiction, upon the word of eminent professors whose opinions upon this point have been made known to the Tribunal either by their works or by their written attestations produced in the discussion, that a re-constitution of the work simply by consulting the plate or the disk upon which it is recorded would be altogether impossible, all of which precludes the consideration of this process as a means of propagation in the sense that musical notation can lead to the discovery of the thought of the author, can make his work known, and can facilitate the execution of the same.

These cylinders, although they cannot of themselves produce this result, furnish a means of so doing when adapted to the instrument for which they are intended; and, according to the reasoning of the plaintiffs, the rights of the author will manifestly suffer an attack by the fact of the reproduction of his work thus rendered possible and easy by means of these cylinders, which, reproduced by plastic galvanism in an infinite number of copies and offered for sale, constitute therefore in fact an edition *sui generis*, infringing upon the rights reserved to authors.

698 But even if the broadest rights were conferred upon authors by the law of 1793 already cited, and by the articles 425 *et seq.* of the Penal Code, the law of 1866, determining and fixing the scope of the application of these texts, has decided that the monopoly of authors should restrain itself within certain limits and that the reproduction of musical airs by means of mechanical instruments cannot be considered as an infringement of their rights.

Contrary to the contention of the plaintiffs, these phonograph cylinders or disks cannot be considered separately and independently of the instruments to which they are adapted, and which, being put in movement by clock-work or by any other means, manifestly constitute mechanical instruments within the meaning of the law.

These objects, although materially separated and capable of separate manufacture and sale, form an integral part of the instruments themselves, in the sense that without them these instruments could produce no sound, and that both these and those, intended to complete each other naturally and necessarily as joint and several parts of a single mechanism, can be thought of only as associated in connection with an indivisible operation, in the absence of which they would be essentially and completely useless, since the mechanism deprived of the cylinder, or the cylinder without the assistance of the mechanism, would cease to serve their purpose and would be equally powerless to reproduce any of the airs or musical compo-

sitions that can be heard only by their combined and simultaneous operation.

In thus forming a body with the instrument of which they are, in a word, an interchangeable but necessary part, these disks or cylinders, when in operation and rendering the airs or words recorded upon them, should, for the same reason as the mechanical instrument itself, profit by the immunities provided by the law of 1866, and escape all claims on the part of authors.

699 These plaintiffs vainly contend that this law, which constitutes an evident attack upon their property and possesses all the qualities of a derogatory law, should, according to the principles always applied in similar cases, be given a restrictive interpretation which, by the very nature of things exceeds that intended for it, since the legislator in 1866 could have had in view only a restricted number of instruments then known, such as serinetts, carillons, music-boxes and hand-organs, which he wished specifically to free, for the benefit of Switzerland, from the obstacles and penalties with which they would have been menaced at the frontier custom-houses or in French territory; that one could not, at that time, for-see the discoveries and scientific applications which have followed and have given birth to the phonograph and its successors, and that, under these circumstances, this instrument and its derivatives could not have been for-seen by the legislator as an immediate or remote possibilty.

There is occasion to remark, first of all, that the law textually considered makes no distinction between the instruments that it intended to exonerate from the infringement.

There was nothing to prevent its framers from employing limiting terms if they had wished to preserve authors from all ulterior encroachments that the discoveries of the future and the constant progress of science and mechanism even then caused them to fear and warned them to avert, all the more that several speakers among the opponents of this law had manifested their lively apprehensions in this respect, and by presenting all the attacks to which authors would become liable, tried by this means to defeat the proposition. In spite of all, the legislator, although almost obliged to make a distinction, did not, however, in the text of the law make any distinction limiting its scope. The terms he employed are as

700 general and comprehensive as possible and ought, therefore, to apply to all kinds of instruments producing music by any mechanism whatsoever.

Furthermore, this law, considered in the spirit of the same, admits still less of the narrow interpretation to which the plaintiffs would subject it.

In fact, if one goes back to the circumstances that made a necessity of the vote, one will note that the authorities on jurisprudence were divided at the time on the point as to whether the reproduction of airs on hand-organs constituted, to the detriment of authors, an infringement punishable by the terms of the law of 1793 and of the Penal Code. While the Court of Rouen, by its decision of July 31st, replied negatively, the Court of Cassation, by its decision of February

13, 1863, accepted the contrary theory already sanctioned by the Correctional Tribunal of the Seine (judgments of May 25 and June 11, 1859), and of the Court of Paris (decision of Dec. 16, 1859), and cause its theory to be adopted by the Court of Orleans, designated as the Court of Reference (decision of April 22, 1893).

It was with the knowledge of this conflict of opinions, exposing her citizens to legal difficulties growing out of a simple and always possible change of views in jurisprudence, that Switzerland, at the moment of concluding the treaty then in progress with France, made the most express reservations, voicing the apprehensions caused her by the difference of opinion in jurisprudence, and finally made a formal demand through her plenipotentiary for provisions that would assure to the Swiss manufacturers the continuation of the existence of immunities that she had until then enjoyed.

From this concourse of circumstances and incidents was born the project that later became the law of 1866. The French gov-
701 ernment, out of deference to the demands of Switzerland, was thus forced by the impossibility of furnishing by any other means the guarantee required, to accept the jurisprudence that had interpreted the law of 1793 in the sense understood and desired by Switzerland; that is to say, the one that refused to see a crime of infringement in the reproduction of musical airs by mechanical instruments, and to translate the substance of the decision of the Court of Rouen into a law which, borrowing from this decision its judicial and interpretative character, should possess this same character and should decide, following the mode of interpretation adopted in preference to any other, on account of the circumstances already cited, that from that time forward the controversy should cease, and that thenceforth the law of 1793 should have a meaning in conformity with that which the new text was framed to give to it.

Not only the origin of this law leads to this conclusion, but the discussions preceding it and the speeches and commentaries made upon it are not less conclusive and productive of the same deductions.

In fact, the Marquis d'Andelare, in his report made to the Corps Legislatif, after having taken pains to declare that it was not possible to find in mechanical instruments "the conditions of reproduction by impression, by engraving, or by any other similar means required by the law as constituting an infringement," and after having expressed the opinion that there could not be "in the execution by the instruments—the tangible musical reproduction, susceptible of being used for business purposes, that may be considered as a musical publication," remarks that according to the opinion of the committee, in the councils of which the law was elaborated, the same was not proposed, "as a law by way of innovation, but as an interpretative or declarative one following the same terms as this report;" that the author of the exposé of motives, the re-
702 porter to the Chamber of Deputies and to the Senate, were all agreed in support of the law, as to the necessity of revising the theory of jurisprudence of the Court of Cassation in order to

return to the true principles of the law of 1793, and that they defended themselves against the reproach of having no other care than to defer to the demand of Switzerland, and of having, in consideration of this single demand "presented the proposed measure." The first of these documents, after having stated the circumstances preceding the project, expresses itself thus: "These considerations seem to us of a nature to assure the favorable reception of the project submitted to you. Its provisions are very simple; they only affirm what has always existed since legislation has regulated the rights of authors; they fix definitely the meaning of the texts that have brought on disputes." And M. Delangle, in very explicit terms claimed for the legislator "the right to define the crime of infringement, and to maintain under the law an opinion contrary to that of the jurisprudence upon a controverted point."

Considering that after having characterized the proposition in the same way, President Bonjean, who had, however, combatted the project, followed M. Delangle, presenting it under the same aspect and in a manner not less expressive, and claiming for the legislator the right "to put an end to a troublesome divergence" and "to declare, without introducing any new right, the true meaning of the old law in order, if for no other reason than to put an end to doubt; it is in a word," concluded he, "an interpretative law."

Merimee, himself, who was equally hostile to the law, could not resist the evidence of this reasoning, and after having explained the controversy that it provoked, was obliged to reconsider the
703 matter, finally accepting the opinions previously cited to the effect that the project, far from constituting a spoliation to the detriment of authors by the repeal of a right that they had held by the law of 1793, tended only toward one end: to change the theory of jurisprudence which "considered as an infringement the unauthorized manufacture of cylinders and plates for use in mechanical instruments for the execution of pieces held as private property."

It matters little that in the records of the discussion speeches are found emanating from the most distinguished orators, such as Marie, Pinard and others, who contested this view of the law. The result of the discussion should alone be considered. The vote on the law not only sanctioned the text, but at the same time caused to prevail the expressions of opinion uttered by its defenders against different opinions definitely formulated by the advocates of a cause that did not triumph. It is certain, therefore, that the law of 1866 has taken away nothing from the authors; that it has only regulated, by reducing to their legal limits, the rights recognized as theirs by the law of 1793, and which the jurisprudence had enlarged, and that under the pressure of a certain circumstance it rectified this interpretation by a new interpretation, by virtue of which it is essentially free from the narrow meaning within which the plaintiffs wish to confine it.

This final general consideration, following the rules of interpretation of laws, serves to sustain said opinion.

The law of 1866 removes from the case in question the application of the text of the penal law. It speaks only in a general way of mechanical instruments, which it provides for in mentioning them

only as a class, and without specifying the species in a case essentially and incontestably criminal, in which the correctional magistrate, being inclined to adopt the interpretation most favorable to
704 the prisoner, would be constrained to enlarge rather than to restrict the meaning of the law, to absolve from infringement in the case of any mechanical instrument whatsoever, or, in a word, to absolve rather than to condemn. The civil judge, knowing the species only by virtue of the power accorded to the injured party by article 3 *C. inst. crim,* has not even to pronounce upon the reparation to be made for the damage caused by the defense. He must previously inquire into and establish the offense, and in thus inquiring into the same and in making his decision he must be guided only by the methods of the criminal law, and therefore give to the text to be interpreted the strictest sense, when it may be turned to the detriment of the accused; on the other hand, giving to it, as also to the determination of the species, the broadest meaning when the fate of the accused can thereby be more or less ameliorated.

The plaintiffs vainly maintain that the law of 1866 had in view the reproduction of musical airs alone, by implication excluding the reproduction of the human voice and airs accompanied by words.

The author's copyright gives no other right than that of publishing, having sold and publicly representing his work.

The audible reproduction of this work by song, as well as by mechanical instruments, is lawful for all on condition that the same is not exploited commercially by public representation.

The registration of airs alone or accompanied by words upon phonographic cylinders or disks is nothing but the impression of the audible reproduction of the author's work produced by the execution of said work by musicians, by singers or by an orchestra which, placing themselves before the disk of the cylinder, produce sounds, musical or articulated, giving rise to vibrations of air which
705 communicate themselves with different degrees of intensity to the objects to be impressed, thus engraving themselves on their surface.

There is no occasion to distinguish as to whether the registration is applied to airs or to words. The audible reproduction in the one case, as in the other, belongs only to the artist performer who lends to the same his own voice, his accent, and so to speak, his personality. This cannot be confounded with the publication of the work and it avoids the author's copyright. The rights of the latter could be reasserted only in case the reproduction thus obtained and fixed should serve in its turn, by means of the phonograph, for a public and paying reproduction, thus constituting by the benefits procured, either directly or indirectly, a presentation or commercial exploitation of the work, in which case the author, claiming the rights created for his benefit by the laws of 1791 and 1793, could claim payment from those thus using his composition, either as the sole or secondary feature of a commercial exploitation of the same.

All the arguments above deduced and having in view specifically the musical airs specified by the law of 1866 apply as well to airs with words by a perfectly natural mode of reasoning that permits,

and even requires, that the text of the law be understood and applied according to the wide interpretation imposed by all the considerations of fact and right herein previously set forth from the combination of which it appears that the different claims formulated by the plaintiffs are without foundation.* * *

706 Attest:

I, the undersigned, Paul Bogelot, attorney of the Court of Appeals, Paris, do hereby certify that the text of the decision hereinbelow reproduced is in conformity with the judgment of July 23, 1902, and without any change from the same.

PAUL BOGELOT,
38 *Rue de Louvre, Paris.*

[Seal of the Mayoralty of the 1st Arrondissement, Paris, French Republic.]

Seen by the Mayor, 1st Arrondissement, Paris, for the legalization of the signature of M. Paul Bogelot.

A. JOLLY, *Mayor.*

Civil Tribunal of the Seine,

Session of July 23, 1902,

M. Roulleau, Presiding.

Case of Alfieri *et al. v.* The Gramophone Company.

The Tribunal:

* * * * * * *

Furthermore, by the terms of the law of May 16, 1866, the manufacture and sale of instruments serving to mechanically reproduce copyrighted musical airs do not constitute the musical infringement forbidden by the law of July 19, 1793. It is evident that the cylinders in question are only a part of an apparatus intended to reproduce mechanically musical airs; this being so true that it would be impossible to reproduce these airs without the other parts of the instrument, or to read them for execution upon any instrument whatsoever. Therefore the provisions of the law already cited are incontestably applicable to the pieces of music recorded upon the cylinders figuring in the case, whosoever may be the author of the composition of said airs.

* * * * * * *

707 UNITED STATES OF AMERICA,
Northern District of Illinois, County of Cook, ss:.

Frederick G. Fischer, being duly sworn, deposes and says that he is an attorney-at-law and connected with the office of Charles S.

Burton, of counsel for the defendant herein; that hereto annexed is a correct copy of the decision rendered by the Supreme Court of Judicature (Great Britain), of Chancery Division, in the case of Boosey *v.* Whight, as the same is found reported in Volume 15 of the Times Law Reports, at pages 322 *et seq.*, and in Volume 1 of the Law Reports, Chancery Division, for the year 1899, at pages 836 *et seq.*

Deponent further says that hereto annexed is also a correct copy of the decision rendered by the said Court of Judicature, Court of Appeals, upon appeal taken in the above entitled case of Boosey *v.* Whight, from the decision of the Chancery Division of said court, as said decision is found reported in Volume 81 of the Law Times, at pages 571 *et seq.*, and in Volume 1 of the Law Reports, Chancery Division, for the year 1900, at pages 122 *et seq.*; that the reports hereinabove mentioned are standard publications of accepted reliability found in the library of the New York Law Institute and also in the library of the Bar Association of the City of New York.

FRED'K G. FISCHER.

Sworn to before me this 30th day of November, 1904.

EDWARD T. WRAY,
Notary Public.

[SEAL.]

708 Chan. Div.

APRIL 19, 1899.

STIRLING, *J.*:

BOOSEY
v.
WHIGHT.

Copyright—Musical composition—Song—Action for infringement—Rolls of perforated paper used for producing musical sounds. *Held*, no infringement.

Mr. Justice Stirling, in giving a considered judgment, said.—This is an action by the proprietors of the copyright in the music of three songs, known as "My Lady's Bower," "The Better Land," and "The Holy City," to restrain alleged infringement. No question is raised as to the plaintiffs' title to the copyright, or to their right to sue for infringement. The sole question in the action is whether the copyright has or has not been infringed. The acts complained of consist in the sale by the defendants of perforated sheets of paper for use in an instrument called the æolian, which externally bears a considerable resemblance to a piano, but is a wind instrument worked mechanically, but furnished with stops, swells, and pedals, by means of which changes in time and expression are effected. It contains 46 pipes and reeds, each of which sounds a particular note. The sheets in question are made in the form of rolls, and when placed in the instrument are unrolled by its action. They are so prepared that whenever a perforation passes under a particular pipe and reed the appropriate note is sounded. The perforations are made in straight lines parallel to the edges of the rolls, so that all perforations in the

same line give the same note. The perforations are of different lengths, so that if the same time be kept, as would be the case if the machine is left to itself, the length of the perforation indicates the duration of the note. At the beginning of each roll is printed a statement as to the key in which the piece of music
709 is written. The object of this is stated to be, and I see no reason to doubt it, to enable a person desirous of so doing to obtain the vocal music to which the instrumental music is an accompaniment. The rolls contain no indications of any change of key which may occur. There are, however, printed on some of them, though not on all, certain words which are found in the sheets of music published by the plaintiffs, such as *andante, moderato, piano, crescendo,* indicating the pace and expression at and with which the music ought to be played. These words are visible to the player, and, indeed, are obviously intended for his guidance. If one of these rolls be introduced into the instrument, the music will in ordinary course be produced at the same pace and with the same degree of loudness; these are altered by the use of the stops; and the skill of the player appears mainly to consist in availing himself of these aids so as to produce the best effect. The æolian is made of two sizes. The rolls used in both are constructed on the same principle; the only difference appears to be that in one case they are about an inch broader than in the other. It was admitted by the defendants' counsel that it is quite possible to prepare a key by which the notes corresponding to the perforations can be copied down, and, in fact, such a key has been prepared and applied to one of the pieces of music in question. No witness was called who professed to be able to read these rolls in the same way as an ordinary sheet of music, and, indeed, all that is said by Mr. Boosey, one of the plaintiffs, was that "any person acquainted with the perforation of the sheets sold by the defendants could write out the music in the ordinary notation therefrom." The defendant's witnesses said that these rolls conveyed no idea of music to them; but they were accustomed to the ordinary notation, and all, or most of them, admitted on cross-examination that they would be able to say the same thing of music written in the tonic sol-fa notation or that used by the blind.
710 I think it is possible that with considerable trouble a person might so far master the scheme according to which the perforations are made as to be able to read the notes thereby denoted, but no one is shown ever to have done so. The result of the evidence appears to me to be that the information conveyed by the rolls to the mind of the reader would, to a substantial degree, be the same as that afforded by a sheet of music in the ordinary notation, but would be in various ways less complete. It also appears to me that for this purpose the rolls constitute an extremely cumbrous system of writing music, hardly available without the use of some mechanism which at present does not exist. I think it is improbable that anyone would ever go to the trouble of acquiring the art of reading these rolls. No question arises as to the right of performance of these pieces under section 20 of the Copyright Act of 1842. What is in dispute is whether the sale of these rolls constitutes an

infringement of the copyright vested in the plaintiffs under the earlier part of the Act. This turns on the construction of section 2, by which the word book is to be construed to mean and include (amongst other things) every sheet of music separately published, and the word copyright is to be construed to mean "the sole and exclusive liberty of printing or otherwise multiplying copies of any subject" to which the word is applied in the Act, including, therefore, a sheet of music. The contention of the plaintiffs is that the rolls are copies of a substantial part of what is found in the sheets published by them, though expressed in a somewhat unusual and difficult form of notation, and consequently that the sole and exclusive liberty of multiplying copies is infringed, just as the publication in shorthand of an ordinary piece of letterpress would be an infringement of the copyright therein (see "Nicols *v.* Pitman," L. R., 26 Ch.D., 374). For the defendants it is urged that the rolls really form parts of machines for the production of musical sounds, and that the Legislature in passing the Copyright Act shows no intention of interfering with such mechanism. In my opinion the latter view is in the main to be preferred. It was decided in "Bach *v.* Longman" (2 Cowp., 623) that the copyright conferred by the statute 8 Anne, c. 19, on the authors of printed books extended to printed music. This decision has been embodied in section 2 of the Act of 1842, as quoted above. The copyright conferred by that Act appears to me to be the exclusive liberty of multiplying copies of something in the nature of a book. The rolls, so far as they contain perforations, are, in fact, used simply as parts of a machine for the production of musical sounds, not for the purpose of a book. They are used as a means of appealing to the mind directly through the ear; not, as in the case of a book, through the eye of an ordinary reader, or through the sense of touch in the case of a blind person. Some mechanical instruments for the production of musical effects, as, for example, the musical-box and the barrel-organ, seem to have been well-known in the last century, long prior to the passing of the Act of 1842. It was admitted by Mr. Scrutton in his able argument for the plaintiffs that, if the construction sought to be placed by them on the Act be sound, the cylinder of a musical-box is a sheet of music within the statute. If this had been within the contemplation of the Legislature I cannot but think that the framers of the Act, who were careful to point out what the word "book" was to mean and include, would have been no less careful to explain that the term sheet of music was to mean and include something which would not fall within the ordinary acceptation of the words. There is no decision in this country precisely in point. In "Holinrake *v.* Truswell" (L. R. [1894], 3 Ch., 420) it was held that a cardboard pattern sleeve containing on it scales, figures, and verbal directions for adapting it to sleeves of any dimensions was an instrument or tool incapable of copyright under the Act of 1842, though possibly the subject-matter of a patent. In the statutes relating to copyright in paintings and engravings limitations of various kinds have been placed on the meaning of the word "copy." See "Dicks *v.* Brooks" (L. R., 15 Ch. D., 22), "Hanfstaengl *v.* Empire Palace" (L. R., [1894], 2 Ch. 1), and "Hanfstaengl v. Baines"

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(L. R., [1895], A. C., 20). In my judgment the Act of 1842, fairly construed, does not prevent the defendants from making or selling these rolls so far as they contain perforations. I think, however, that in adding to them words, taken from the plaintiffs' music sheets, for the purpose of indicating to the player on the instrument the pace and expression at and with which the music ought to be played, the defendants have gone beyond their rights, and that there ought to be an injunction to restrain them from so doing. Under all the circumstances I propose to make no order as to costs.

[Solicitors—Wilkinson, Howlett, and Co., for the plaintiffs; Maples, Teesdale, and Co., for the defendants.]

713 Dec. 4, 5, and 13, 1899.

(Before Lindley, M. R., Sir Francis Jeune, and Romer, L. J.).

BOOSEY
v.
WRIGHT.

Appeal from the Chancery Division.

Dec. 13, 1899.—The following written judgments were delivered:—

LINDLEY, *M. R.* read the following judgment in which Sir Francis Jeune concurred.—The plaintiffs are entitled to copyright in three sheets of music. What does this mean? It means that they have the exclusive right of printing or otherwise multiplying copies of those sheets of music—*i. e.*, of the bars, notes, and other printed words and signs on those sheets. But the plaintiffs have no exclusive right to the production of the sounds indicated by or on those sheets of music; nor to the performance in private of the music indicated by such sheets; nor to any mechanism for the production of such sounds or music. The plaintiffs' rights are not infringed except by an unauthorized copy of their sheets of music. We need not trouble ourselves about authority; no question turning on the meaning of that expression has to be considered in this case. The only question we have to consider is whether the defendants have copied the plaintiffs' sheets of music. The defendants have taken those sheets of music and have prepared from them sheets of paper with perforations in them and these perforated sheets, when put into and used with properly constructed machines or instruments, will produce or enable the machines or instruments to produce the music indicated on the plaintiffs' sheets. In this sense the defendants' perforated rolls have been copied from the plaintiffs' sheets. But
is this the kind of copying which is prohibited by the Copy-
714 right Act; or rather is the perforated sheet made as above mentioned a copy of the sheet of music from which it is made? Is it a copy at all? Is it a copy within the meaning of the Copyright Act? A sheet of music is treated in the Copyright Act as if it were a book or sheet of letterpress. Any mode of copying

such a thing, whether by printing, writing, photography, or by some other method not yet invented would no doubt be copying. So, perhaps, might a perforated sheet of paper to be sung or played from in the same way as sheets of music are sung or played from. But to play an instrument from a sheet of music which appeals to the eye is one thing; to play an instrument with a perforated sheet which itself forms part of the mechanism which produces the music is quite another thing. I have consulted Johnson's, Richardson's, and Murray's dictionaries to ascertain the meanings attributed to the word "copy"; and I do not myself think that the perforated sheet can be said to be a copy of the sheet and music unless the word "copy" is used in a very loose and inaccurate sense. Be this as it may, I cannot think or bring myself to decide that the perforated sheet is a copy of a sheet of music within the meaning of the Copyright Act. The fundamental ideas underlying them are different and the uses to be made of them are fundamentally different. Music appeals to the ear, but a sheet of music appeals to the eye, and the observation of Bayley, J. in West *v.* Francis (5 B. & A., p. 743) is applicable not only to engravings but to all kinds of books, and the Copyright Act treats a sheet of music as it treats a book. He said: "A copy is that which comes so near to the original as to give to every person seeing it the idea created by the original." I do not say that the defendants' perforated rolls cannot possibly be regarded as sheets of music. They may possibly be so regarded by specially skilled persons who have learned to read the perfo-
715 rations. Conceding for the sake of argument that a person might be trained to play or even to sing from the perforated sheets, it is clear that they are not made to be so used, nor are they ever so used in fact; and we ought, in my opinion, to deal with the case on broad business lines and not on unpractical, though theoretically possible, assumptions. If these perforated rolls were new, it appears to me that their invention might be patented; and this could not, in my opinion, be said of any copy of any book. It may be true that the manufacture and sale of the perforated sheets diminish the sale of the plaintiffs' sheets of music. But it does not follow that the plaintiffs' copyright has been infringed; and I am of opinion that it has not. I regard the defendants' perforated sheets as part of a mechanical contrivance for producing musical notes; and I cannot think that manufacturers of musical instruments infringe any person's copyright by so constructing their machines and appliances to be used with them as to produce musical notes indicated on a sheet of music. On this broad and very important question—which, so far as I know, has never been raised before in this country—I am of opinion that the decision of Stirling, J. is correct. There is, however, another but comparatively subordinate question on which I am unable to agree with him. He has restrained the defendants from copying the directions on the plaintiffs' sheets of music to the person using them. The defendants' appeal from this part of the judgment ought, in my opinion, to succeed. The directions in the plaintiffs' sheets of music are no doubt protected by their copyright so long as they are used in connection with their musical

scores. But, apart from those scores, the plaintiffs have no copyright in such directions. The directions are not in themselves a sheet of music, nor are they a sheet of letterpress separately published. Even if they were they would be mere words, not
716 sentences forming a literary composition in which copyright could be acquired. Upon this point the case is governed by Hollinrake *v.* Truswell (71 L. T. Rep. 419; (1894) 3 Ch. 420), and the injunction granted by Stirling, J. to restrain the use of these directions must be discharged. The net result is that the plaintiffs' action wholly fails. Their appeal must be dismissed and the defendants' appeal allowed. The order appealed from must be varied by striking out the injunction, and judgment must be entered for the defendants with costs here and below.

ROMER, *L. J.*—I agree in thinking that the appeal of the plaintiffs should be dismissed. As the question involved is one of some importance, I desire to add a few remarks. The rights under the Copyright Act of an author of a musical piece are: (1) To prevent others from copying the published music regarded as a book; and (2) to prevent the music itself being performed in public without the author's permission. But anyone may perform the music in private by voice, musical instrument in the ordinary sense such as violins, piano, and so forth, or by any mechanical instrument. And seeing that mechanical instruments for producing musical sounds were well known at the date of the Act, I think that the Legislature never contemplated that the author's right to multiply copies of published music would entitle him to stop the use in private of such an instrument because it performed the published music. Of course I am now speaking of mechanical musical instruments known at the date of the Act. But those instruments were numerous and included, for instance, musical boxes. The Act, to my mind, never contemplated that the cylinder of a musical box, taking that as one of the best-known mechanical instruments, could be regarded as a copy of the printed music, even though an accomplished musician might be able by inspection of the cylinder to gather from it the notes
717 of the music. Now, in the case before us, the sheets which are said to be copies of the plaintiffs' published sheets of music were issued only for the purpose of being used as parts of a mechanical musical instrument to produce musical sounds. And as a matter of substance the defendants' sheets have in fact only been used by those to whom they were issued for the sole purpose for which they were in fact issued. But it is said that they could be used so as to answer the same purpose as copies of the plaintiffs' printed music, and that therefore they ought to be regarded as copies within the Act. To my mind it does not of necessity follow that because a thing might be so used as to answer the same purpose as a copy of a book it must be regarded as a copy within the Act. But, passing that by, I deal with the question before us as one of substance, and I ask myself whether in substance and in any practical view the defendants' sheets could be used so as to answer the purpose of copies of the plaintiffs' musical sheets. On the evidence in the case I agree with my brother Stirling that this question must be answered in the

negative. And I think that that really disposes of the appeal. In no practical or substantial view, in my opinion, can the defendants' sheets be regarded as copies within the meaning of the Act of the plaintiffs' sheets of music regarded as books. And I may add, at the risk of repeating what I have already said, that the plaintiffs' sheets and the defendants' sheets are issued and used for substantially different objects. The plaintiffs' sheets are issued and used as books to be read. The defendants' sheets are issued and used, not as books to be read, but as parts of a mechanical musical instrument to produce the sounds of music. On the defendants' appeal, which raises a question of comparatively little practical importance, although I have felt some doubt about it, especially having regard to
718 Stirling, J.'s views, I come, on the whole, to the same conclusion as the Master of the Rolls. I think that no substantial part of the plaintiffs' book—that is, of their printed musical sheets—has been copied by the defendants. So far as words have been taken from the plaintiffs' book and put on the defendants' sheets, they have no use or connected meaning by themselves and are only of use on the defendants' sheets in any practical point of view as directions for working the defendants' mechanical instrument to produce musical sounds. I therefore agree in thinking that the plaintiffs' action ought to stand dismissed with costs here and below.

Appeal dismissed. Cross-appeal allowed.

Solicitors for the plaintiffs, Wilkinson, Howlett, and Co.
Solicitors for the defendants, Maples, Teesdale, and Co.

719 United States Circuit Court, Southern District of New York.
In Equity.

No. 8126.

"Little Cotton Dolly."

White-Smith Music Publishing Company, Complainant,
vs.
Apollo Company, Defendant.

No. 8127.

"Kentucky Babe Schottische."

Same
vs.
Same.

Dickerson, Brown, Raegener & Binney, for Complainant.
Charles E. Hughes, Edwin H. Brown, Alexander P. Browne, of Counsel.
Wilcox & Brodek, for Defendant.
Charles S. Burton, Munday, Evarts & Adcock, of Counsel.

HAZEL, *J.*:

These actions were brought to restrain the alleged in-
720 fringement of copyrights in the musical compositions "Little Cotton Dolly" and "Kentucky Babe Schottische," composed by Adam Geibel. The bill avers that complainant was the publisher and proprietor of both copyrights, the musical compositions having been assigned and transferred to it by the composer. The answers are denial of infringement and of complainant's title to the copyrights in question. The elicited facts which are not in serious conflict, apply to both cases and the records in each are substantially the same. The legal principles involved, though important, are not, in view of prior adjudications, difficult of application. Complainant contends that the copyrights mentioned have been unlawfully infringed by the defendant, which concededly has sold the copyrighted musical compositions in the form of perforated records or sheets adapted to mechanically reproduce the music upon the pianoforte, pianola and other musical instruments. The general question raised is whether the perforated music sheets for use in connection with mechanism for playing musical instruments is an infringement of complainant's copyrighted musical composition. The proofs show that perforated music sheets corresponding to staff notations are produced in various ways by persons skilled in the art, technically called the cutter or arranger. Perforated matrices are prepared either from a printed sheet of music, from a perforated music roll or by means of an automatic recording device which simultaneously operates to produce a matrix while music is being played upon the piano. In the preparation of the matrices, as distinguished from a music roll prepared by a recording device, perforations or slots of varying width, are indicated; their positions and character are longitudinally and transversely arranged and accurately defined by a system of measurements correlative
721 with the staff notations. The impracticability of reading a perforated sheet of music for the purpose of singing or playing the composition represented by the perforations, is not seriously disputed, although complainant claims that the automatic records, like the staff notations, may be deciphered and learned. The evidence, however, quite conclusively establishes that the single purpose of the perforated sheets is to mechanically reproduce musical sounds and are not, like the sheet music, addressed to the vision or intended to be read.

Before discussing the principal point involved, it is proper that the question of disputed title of the copyrights be first considered. The defendant contends that the musical composition "Little Cotton Dolly" was licensed to the complainant as publisher subject to the payment of royalties and was not transferred with the view of divesting the composer of the title therein. The Court has considered this question and the phraseology of the agreement of June 18, 1897, by which it probably might be concluded that only the right to publish the composition had been previously granted. Such an interpretation of the contract, however in view of the oral evidence and acts of the parties, is not warranted. The proofs show *inter alia*, that the composer authorized the copyrighting of the

musical composition in the name of the complainant. The composition was delivered to the complainant by the composer in May, with the understanding that it should be published, and subsequently, in writing, he expressly authorized complainant to copyright the same. At this time, however, the composition had already been copyrighted by complainant in accordance with the laws of the United States respecting copyrights. Giving consideration to all the facts and surrounding circumstances, no repugnancy
722 is perceivable between the agreement mentioned and any prior arrangement or understanding that complainant should possess the composition as its proprietor. The question is whether in fact there was such an assignment or transfer of the musical composition before copyrighting as to carry with it the privilege given by the statute to the composer. As the testimony upon this point is not entirely free from indefiniteness, we must look to the acts of the parties to ascertain their intention. It is not a strained presumption giving effect to the transaction and the proofs that complainant or its agent, Mr. White, who afterwards assigned the same to the complainant, was vested with the legal title as proprietor of the composition. It may reasonably be inferred that the composer having placed the composition with the publisher for publication and distribution intended to authorize him to obtain a copyright in his name or in that of the corporation in whose behalf the assignment appears to have been taken (Mifflin *v.* White, 190 U. S., 263; Belford *v.* Scribner, 144 U. S., 505). It was held in Callahan *v.* Myers, 128 U. S., 658, that a written assignment may be necessary to convey title after obtaining a copyright but a publisher undoubtedly may become the owner by parol transfer of the rights of the author or composer. Moreover, it clearly appears that the composer Geibel had knowledge of the copyrighting by the complainant prior to the agreement for royalties and acquiesced therein. The later agreement contained nothing derogatory to the prior transaction or transfer of the composition and would seem, in view of the facts, to be a ratification of that which had gone before. Hence, it is sufficiently established by the evidence that the complainant had the exclusive right as proprietor to multiply copies of the copyrighted musical composition and to expose the same for sale.
723 As stated, the important question for consideration is whether defendant's method of representing and reproducing the musical compositions infringed the copyrights of the complainant. The principle thought to control, based upon the Revised Statutes, is found in Perris *v.* Hexamer, 99 U. S. 674. It is there stated—

"A copyright gives the author or the publisher the exclusive right of multiplying copies of what he has written or printed. It follows that to infringe this right a substantial copy of the whole or of a material part must be produced."

By Section 4952 of the Revised Statutes, the author or proprietor of any musical composition, upon compliance with the provisions of the copyright act, is given the exclusive liberty of copying and vending the same. Are the perforated music sheets or rolls, which are designed to mechanically represent or reproduce the copyrighted

musical composition, copies thereof within the meaning and intent of the statute? What did Congress intend by the words, "musical composition?" These questions, though not entirely new, are interesting and important. The words "musical composition" undoubtedly relate to the intellectual conception of the composer, but manifestly a careful reading of the copyright law, in connection with the authorities construing the act, indicates that protection only of the material semblance in which the musical composition finds expression, is afforded (Ditson *v.* Littleton, 67 Fed. Rep., 905). The musical composition as an idea in the concrete is not copyrightable as such. That which gives the conception corporeal and tangible existence is the subject of copyrighting. To hold otherwise, indeed, would be a wide departure from the obvious intention of Congress in extending to the author, inventor, designer, proprietor, etc., the protection secured by statute. But it is vigorously insisted that the proofs show that the perforated music sheet is in fact a record of the musical composition. Many witnesses of musical distinction have testified that the perforations are a form of notations without bars or measurements, and hence not only correspond with the tones of the musical composition but that a perforated music roll or sheet is actually a record thereof. Opposed to this contention is the suggestion that under the constitutional power of Congress "To promote the progress of science and useful arts, by securing for limited times to authors and inventors, the exclusive right to their respective writings and discoveries," a copyrightable musical composition must be a writing and not, as already intimated, a mental conception not reduced to material form. The meaning of the word "writings," as employed in the constitution, has been expressly defined in Lithographic Co. *v.* Sarony, 111 U. S., 54, to include—

"all forms of writing, printing, engraving, etching, etc., by which the ideas in the mind of the author are given visible expression."

The restricted definition of the word "writings" does not, it is thought, permit the inclusion in Section 4952 of the Revised Statutes, of a musical conception of the inclusion of collateral musical sounds or expressions of a musical composition. The words of the statute have reference to the tangible object that appeals to the sense of sight and that which is susceptible of being reproduced by printing, copying, publishing, etc. It is contended that the enactment of January 6, 1897, Section 4966, indicates that Congress in the earlier provision used the words "musical composition" with a view of securing protection to the author for his musical conception. The later provision inhibits the public performance of a copyrighted musical composition without the consent of the proprietor, unless the same has previously been designated to the public (Werckmeister *v.* American Lithographic Co., 134 Fed. Rep., 321). These two provisions, however, are not conflicting, and I perceive no reasonable objection to their standing together. I am of opinion that the reference to musical compositions as employed in Section 4952 is restricted to a writing, as that word is defined in the Sarony case, *supra*. Moreover, the perforated sheets of music or records are not copies of the musical composition

protected by the copyright laws. The significance of the word "copying" as applied to the subject under consideration has been several times legally construed (Kennedy *v.* McTammany, 33 Fed. Rep., 584; Boosey *v.* Whight, 15 T. L. R., 322; Stern *v.* Rosey, 17 App. D. C., 562). In the Kennedy case, which was decided in 1888, Judge Colt held that perforated music rolls or strips of paper are not infringements of copyright sheets of music, and that such perforated sheets are designed not to occupy the field of sheet music, but are a mechanical invention to mechanically perform tunes. The Boosey case was under a statute which did not in terms mention "musical composition," but the work of the composer was referred to in the English copyright act as sheet music, and in the decision appears to have been treated as if it were a book. Lindley, Master of the Rolls, speaking of the perforated sheets and the meaning of the word "copy," said:

"I have consulted Johnson's, Richardson's and Murray's dictionaries to ascertain the meanings attributed to the word 'copy'; and I do not myself think that the perforated sheet can be said to
726 be a copy of the sheet of music unless the word 'copy' is used in a very loose and inaccurate sense."

In the Stern case, decided in 1901, it was held, Justice Shepard, writing for the Court, that the ordinary meaning of the words "copying," "publishing," etc., cannot be enlarged to include "the reproduction through the agency of the phonograph of the sounds of musical instruments playing the music composed and published by the complainants." There apparently is little difference between the facts of the Stern case and the facts here except that in that case the alleged infringing record consisted of a disc or cylinder for reproducing sounds by means of the phonograph. The Court further said:

"It is not pretended that the markings upon wax cylinders can be made out by the eye or they can be utilized in any other way than as parts of the mechanism of the phonograph."

The principles of the cases mentioned, which manifestly were enunciated after careful consideration, is fully applicable. The distinction insisted upon by counsel for complainant between a sheet of music and a musical composition is somewhat chimerical, assuming, as already indicated, that the protection given by the law is for the material form of the author's origination. The precise arguments here presented may not have been as forcibly and comprehensively insisted upon in the former adjudications, involving as I think the same subject-matter, but the primal questions were fully considered and decided. Taken together, they are something more than mere persuasive precedents. A settled rule of statutory construc-
727 tion is recognized, which the record does not require me to ignore or reject. In these circumstances the importance of uniformity of decision in courts of co-ordinate jurisdiction is apparent and ought to prevail. The proposition that to the author belong his meritorious conceptions and ideas and the fruits of his labors, is not debatable. The beneficial results, however, to which he is entitled, are protected and are specifically defined by statutory enact-

ment. Such enactments being in derogation of common law rights does not require an altered construction beyond the ordinary import (Brown *v.* Barry, 3 Dall., 364; Holmes *v.* Hurst, 174 U. S. 85; Banks *v.* Manchester, 128 U. S., 251; Shaw *v.* Railroad Co., 101 U. S., 557).

My conclusion is that the defendant in making, using and vending the perforated music rolls which reproduce the musical compositions "Little Cotton Dolly" and "Kentucky Babe Schottische," for which copyrights were granted, did not violate the equitable rights of the complainant, as sole proprietor. Decree may be entered accordingly, with costs.

(Endorsed:) United States Circuit Court, Southern District of New York.—In Equity.—Nos. 8126-8127.—White-Smith Publishing Co., Complainant, *vs.* Apollo Company, Defendant; Same *v.* Same.—Opinion, Hazel, J.—U. S. Circuit Court, Southern District of New York.—Filed June 21, 1905.—John A. Shields, Clerk.

728 In the Circuit Court of the United States for the Southern District of New York.

No. 8126. Equity.

WHITE-SMITH MUSIC PUBLISHING COMPANY
v.
APOLLO COMPANY.

Infringement of Copyright "Little Cotton Dolly."

Decree.

This cause coming on to be heard on the 6th day of December, 1904, upon the pleadings and proofs of the respective parties, and counsel having been heard on the part of the complainant, and also on the part of the defendant, and the Court being fully advised, and due deliberation having been had, the Court doth find that there is no equity in the complainant's bill of complaint; and it is therefore ordered, adjudged and decreed that the said bill of complaint herein be and the same is hereby dismissed for want of equity, with costs to be paid by the complainant to the defendant, taxed and to be taxed.

JOHN R. HAZEL, *U. S. J.*

We hereby consent to the form of the foregoing decree.
Dated July 28, 1905.

EDWIN H. BROWN,
Solicitor for Complainant.

729 (Endorsed:) United States Circuit Court, Southern District of New York.—In Equity. No. 8126.—White-Smith Music Publishing Co. *vs.* Apollo Company.—Decree and Con-

sent as to Form.—Wilcox & Brodek, Solicitors for Defendant, St. Paul Building, 220 Broadway, New York City.—U. S. Circuit Court, Southern District of New York.—Filed Aug. 4, 1905.—John A. Shields, Clerk.

Circuit Court of the United States for the Southern District of New York. In Equity.

No. 8126.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

Petition on Appeal.

The above-named complainant, White-Smith Music Publishing Company, conceiving itself aggrieved by the final decree made and entered in the above-entitled cause and filed in the office of the Clerk of this Court, in the City of New York, in the Southern District of New York, on the 4th day of August, 1905, hereby appeals therefrom to the United States Circuit Court of Appeals for the Second Circuit, and prays that its appeal may be allowed and that a citation may be directed to the above-named defendant, Apollo Company, commanding it to appear before the said United States Circuit Court of
730 Appeals for the Second Circuit, to do and receive what may appertain to justice to be done in the premises; and that a transcript of the record, proceedings, evidence and opinion in said case, duly authenticated, may be sent to the said United States Circuit Court of Appeals for the Second Circuit, and that the said decree of the Circuit Court of the United States for the Southern District of New York herein may be reversed and such decree made as to the said United States Circuit Court of Appeals for the Second Circuit may seem meet and just.

DICKERSON, BROWN, RAEGENER & BINNEY,
Solicitors for Complainant.

The foregoing appeal is allowed.
Dated August 14, 1905.

JOHN R. HAZEL,
U. S. Judge.

(Endorsed:) United States Circuit Court, Southern District of New York.—In Equity, No. 8126.—White-Smith Music Publishing Co. *vs.* Apollo Company.—Petition on Appeal.—Dickerson, Brown, Raegener & Binney, 141 Broadway, New York, Solicitors for Complainant.—Copy of the within received this 15th day of August, 1905.—Wilcox & Brodek, Solicitors for Defts.—U. S. Circuit Court, Southern District New York.—Filed Aug. 15, 1905.—John A. Shields, Clerk.

731 Circuit Court of the United States for the Southern District of New York.

In Equity. No. 8126.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

Assignments of Errors.

The above-named complainant, White-Smith Music Publishing Company, having appealed to the United States Circuit Court of Appeals for the Second Circuit, from the Final Decree of this Court, made and entered in the above entitled cause and filed in the Office of the Clerk of this Court on the 4th day of August, 1905, respectfully alleges and makes the following assignments of errors herein:

I. The Court erred in holding that under the Revised Statutes "the musical composition as an idea in the concrete is not copyrightable as such" and in not holding the contrary thereof.

II. The Court erred in holding "that under the constitutional power of Congress 'To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries,' a copyrightable musical composition must be a writing and not, as al-
732 ready intimated, a mental conception not reduced to material form" and by not holding the contrary thereof.

III. The Court erred in holding that "the restricted definition of the word 'writings'" given by the United States Supreme Court in Lithographic Co. *v.* Sarony, 111 U. S., 54, was meant to and did include all writings susceptible of being included in the word "writings" and erred furthermore in holding that the definition given by said Court in that case "does not" "permit the inclusion in Section 4952 of the Revised Statutes, of a musical conception or the inclusion of collated musical sounds or expressions of a musical composition," and by failing to hold the contrary thereof.

IV. The Court erred in holding that "the reference to musical conceptions as employed in Section 4952 is restricted to a writing, as that word is defined in the Sarony case, *supra*."

V. The Court erred in holding that "the words of the Statute have reference to the tangible object that appeals to the sense of sight and that which is susceptible of being reproduced by printing, copying, publishing, etc." and by failing to hold the contrary thereof.

VI. The Court erred in failing to hold that Section 4966 of the Revised Statutes by inhibiting "the public performance of a copyrighted musical composition without the consent of the proprietor," makes it necessary to construe all sections of the Revised Statutes relating to copyrights as applying not only to a record or tangible expression of it, but also to the musical composition itself, so that it was

sufficient for complainant to show that defendant sold any
733 copies or records of a copyrighted musical composition whether such copies or records shall be like what the Court refers to as sheet music, or in other words what is commonly termed "staff notation" or not.

VII. The Court erred in holding that "the perforated sheets of music or records are not copies of the musical composition protected by the copyright laws" and by failing to hold the contrary thereof.

VIII. The Court erred in holding that the perforated sheets of music or records such as are discussed in the opinion are not capable of being read and by failing to hold the contrary thereof.

IX. The Court erred in failing to hold that it was conclusively proved that the perforated sheets of music or records such as are discussed in the opinion could be easily read with the aid of a device called in the testimony a templet rule or scale.

X. The Court erred in ignoring the fact that staff notation is often copied from perforated sheets of music or records such as are discussed in the opinion, and therefore that the perforated sheets or records are used for their function of records or notation.

XI. The Court erred in failing to hold that for certain high class music of great scope the perforated sheets of music or records such as are discussed in the opinion are the only useful records or notation of the music to which they relate.

XII. The Court erred in ignoring the automatically made records of music whose sole function is that of a notation or record of
734 music, and by failing to hold that they were copyrightable and that therefore the perforated sheets of music or records such as are discussed in the opinion were copyrightable because of having the function of a notation or record of music.

XIII. The Court erred in holding in substance that a case of infringement of copyright can only be made out by determining whether alleged copies said to infringe are copies "of copyright sheets of music," meaning sheets of what is otherwise known as "staff notation," and by failing to hold the contrary thereof.

XIV. The Court erred in holding that defendant had not been guilty of infringement and by failing to hold the contrary thereof.

XV. The Court erred in refusing to grant the relief prayed for in the Bill of Complaint.

XVI. The Court erred in dismissing the Bill of Complaint.

EDWIN H. BROWN,
Of Counsel.

(Endorsed:) United States Circuit Court, Southern District of New York.—In Equity.—White-Smith Music Publishing Co. *vs.* Apollo Company.—Assignments of Error.—Dickerson, Brown, Raegener & Binney, 141 Broadway, New York, Solicitors for Complainant.—U. S. Circuit Court, Southern District New York.—Filed Aug. 14, 1905.—John A. Shields, Clerk.

735 Circuit Court of the United States for the Southern District of New York. In Equity.

No. 8126.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

Supersedeas Bond on Appeal.

Know all men by these presents, that we, White-Smith Music Publishing Company, a corporation organized and existing under the laws of the Commonwealth of Massachusetts, as principal, and American Surety Company, a corporation organized and existing under the laws of the State of New York, and having a regular office and principal place of business at No. 100 Broadway, in the Borough of Manhattan, City of New York, in the State of New York, Southern District of New York, as surety, are held and firmly bound unto the above-named defendant, Apollo Company, in the full and just sum of Two Hundred and Fifty Dollars ($250) to be paid to the said Apollo Company, its successors, attorneys or assigns, to which payment well and truly to be made, we bind ourselves, and each of us, our, and each of our successors and assigns, firmly by these presents.

Sealed with the seal of the said American Surety Company,
736 and dated this Eleventh day of August, in the year of our Lord One thousand nine hundred and five.

Whereas, the above-named White-Smith Music Publishing Company has appealed to the United States Circuit Court of Appeals for the Second Circuit, to reverse the final decree rendered in the above entitled cause by the Circuit Court of the United States for the Southern District of New York, and filed and entered in the office of the Clerk of said Court on the 4th day of August, 1905;

Now, therefore, the condition of the above obligation is such that if the above-named White-Smith Music Publishing Company shall prosecute its said appeal to effect, and answer all damages and costs, if it shall fail to make its plea good, then this obligation shall be void; otherwise the same shall be and remain in full force and virtue.

AMERICAN SURETY COMPANY OF NEW YORK,
By L. E. CARMAN, *Vice-President.*

Attest:
[L. S.] J. C. DRAPER, Jr., *Attorney.*

Sealed and delivered, and taken and acknowledged this — day of August, 1905, before me.
[L. S.] ——— ———.

Approved as to form, and also as to sufficiency of sureties, with reservation, however, to the defendant, of the right at any time to examine the proper officers of the Surety Company, under oath, touching its assets, liabilities and financial condition generally.

JOHN R. HAZEL,
U. S. Judge.

737 STATE AND COUNTY OF NEW YORK, *ss:*

On this 11th day of August, 1905, before me personally appeared L. E. Carman, Vice-President of the American Surety Company of New York, to me known, who being by me duly sworn, did depose and say that he resided in Nutley, N. J.; that he is the Vice-President of the American Surety Company of New York, the Corporation described in and which executed the above instrument; that he knew the corporate seal of said Corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by order of the Board of Directors of said Corporation, and that he signed his name thereto by like order; and that the liabilities of said Corporation do not exceed its assets as ascertained in the manner provided by law. And the said L. E. Carman further said that he was acquainted with J. C. Draper, Jr., and knew him to be one of the Attorneys of said Corporation, that the signature of said J. C. Draper, Jr., subscribed to the said instrument, is in the genuine handwriting of the said J. C. Draper, Jr., and was thereto subscribed by the like order of the said Board of Directors, and in the presence of him the said L. E. Carman, Vice-President.

[L. S.] JOHN A. MANNING,
Notary Public, Kings County.

Certificate filed in New York County.

At a regular quarterly meeting of the Board of Trustees of the American Surety Company of New York, held on the 12th day of April, 1893, the following resolution was adopted and is still in force:

"Resolved, That the President and Vice-Presidents be and they hereby are, and each one of them is authorized and empowered to execute and deliver, and attach the seal of the Company to
738 any and all bonds and undertakings for, or on behalf of the Company, in its business of guaranteeing the performance of contracts other than insurance policies, and executing or guaranteeing bonds and undertakings required or permitted in all actions or proceedings by law allowed; such guarantee, bonds and undertakings, however, to be attested in every instance by the Secretary, one of the Assisant Secretaries or one of the Attorneys."

COUNTY OF NEW YORK, *ss:*

I, J. C. Draper, Jr., Attorney of the American Surety Company of New York, have compared the foregoing Resolution with the original thereof, as recorded in the Minute Book of said Company, and do

certify that the same is a correct and true transcript therefrom, and of the whole of said original Resolution.

Given under my hand and the seal of the Company at the City of New York, this 11th day of August, 1905.

[L. S.] J. C. DRAPER, JR., *Attorney.*

(Endorsed:) United States Circuit Court, Southern District of New York.—In Equity.—White-Smith Music Publishing Co. *vs.* Apollo Company.—Supersedeas Bond on Appeal.—Dickerson, Brown, Raegener & Binney, Solicitors for Complainant, 141 Broadway, New York.—U. S. Circuit Court, Southern District New York.—Filed Aug. 14, 1905.—John A. Shields, Clerk.

739 By the Honorable John R. Hazel, sitting as a Judge of the Circuit Court of the United States for the Southern District of New York, in the Second Circuit, to Apollo Company, Greeting:

Whereas, White-Smith Music Publishing Company has appealed to the United States Circuit Court of Appeals for the Second Circuit from the final decree lately made and rendered by the Circuit Court of the United States for the Southern District of New York, made in favor of you, the said Apollo Company, and has filed the security required by law, you are therefore hereby cited to appear before the said United States Circuit Court of Appeals for the Second Circuit, to be held at the City of New York, in the Southern District of New York, on the 11th day of September, 1905, to do and receive what may appertain to justice to be done in the premises.

Given under my hand at the City of New York, in the Southern District of New York, in the Second Circuit, the 14th day of August, in the year of our Lord one thousand nine hundred and five, and of the Independence of the United States the one hundred and thirtieth.

JOHN R. HAZEL,
U. S. Judge.

(Endorsed:) United States Circuit Court, Southern District of New York.—In Equity.—White-Smith Music Publishing Co. *vs.* Apollo Company.—Citation.—Dickerson, Brown, Raegener & Binney, Solicitors for Complainant, 141 Broadway, New York.—Copy of the within received this 15th day of August, 1905.—Wilcox & Brodek, Solicitors for Def't.—U. S. Circuit Court, Southern District New York.—Filed Aug. 15, 1905.—John A. Shields, Clerk.

740 UNITED STATES OF AMERICA,
Southern District of New York, ss:

I, John A. Shields, Clerk of the Circuit Court of the United States of America, for the Southern District of New York, in the Second Circuit, do hereby certify that the foregoing pages, numbered from one to 756, inclusive, contain a true and complete transcript of the record and proceedings had in said Court, in the cause entitled White-Smith Music Publishing Company, Compl't-Appellant, against

Apollo Company, Def't-Appellee, as the same remain of record and on file in my office.

In testimony whereof, I have caused the seal of the said Court to be hereunto affixed, at the City of New York, in the Southern District of New York, in the Second Circuit, this 30th day of September, in the year of our Lord One Thousand Nine Hundred and Five, and of the Independence of the said United States the One Hundred and Thirtieth.

[L. S.] JOHN A. SHIELDS, *Clerk.*

741 United States Circuit Court of Appeals for the Second Circuit.

No. 8126.

"Little Cotton Dolly."

WHITE-SMITH MUSIC PUBLISHING COMPANY, Complainant and Appellant,

vs.

APOLLO COMPANY, Defendant and Appellee.

No. 8127.

"Kentucky Babe."

SAME

vs.

SAME.

Upon the annexed stipulation and consent of counsel for the respective parties in the above-entitled appeals, it is

Ordered, that the transcripts of record in said causes be consolidated and printed together in such manner that no testimony or exhibits be duplicated, namely, by printing the entire record, including the Exhibit Book, in Case No. 8126, "Little Cotton Dolly," with the first twenty-seven pages of complainant's record in Case No. 8127, "Kentucky Babe Schottische," including the exhibits referred to and offered in evidence by complainant in said twenty-seven pages and omitting from said combined transcript all the rest of the
742 record and exhibits, both complainant's and defendant's, in said Case No. 8127; and that both causes be heard together upon such consolidated record.

Dated Sept, —, 1905.

E. HENRY LACOMBE,
U. S. Circuit Judge.

United States Circuit Court of Appeals for the Second Circuit.

No. 8126.

"Little Cotton Dolly."

WHITE-SMITH MUSIC PUBLISHING COMPANY, Complainant and Appellant,
vs.
APOLLO COMPANY, Defendant and Appellee.

No. 8127.

"Kentucky Babe."

SAME
vs.
SAME.

An appeal having been taken in both the above-entitled causes to the Circuit Court of Appeals for the Second Circuit, and the transcript of record in each case having been duly certified to said Court of appeals; now, in consideration of the fact that the record in
743 both cases is the same, except for the first twenty-seven printed pages of complainant's proofs, with the small number of exhibits therein referred to relating to proof of title,

It is stipulated by and between the counsel for the respective parties herein that, with the approval of the said Circuit Court of Appeals, the transcripts of record in said causes be consolidated and printed together in such manner that no testimony or exhibits be duplicated, namely, by printing the entire record, including the Exhibit Book, in Case No. 8126, "Little Cotton Dolly," with the first twenty-seven pages of complainant's record in Case No. 8127, "Kentucky Babe Schottische," including the exhibits referred to and offered in evidence by complainant in said twenty-seven pages and omitting from said combined transcript all the rest of the record and exhibits, both complainant's and defendant's, in said Case No. 8127; and that both causes be heard together upon such consolidated record.

Dated Sept. 30, 1905.

EDWIN H. BROWN,
Of Counsel for Compl't.
CHAS. S. BURTON,
Of Counsel for Defendant.

744 Circuit Court of the United States, Southern District of New York.

In Equity. No. 8127.

WHITE-SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

STATE OF PENNSYLVANIA, *County of Philadelphia, ss:*

Adam Geibel, being duly sworn, deposes and says I have heretofore testified in this case and I am the author of the musical composition entitled "Kentucky Babe Schottische," and referred to in the record as Complainant's Exhibit No. 5. At the time I composed the music I was a citizen of the United States, to the best of my knowledge, information and belief. I base my information and belief on the following state of facts:

I was brought to this country by my father from Germany when I was a small child. My father became a naturalized citizen long before I became of age. I have voted at State and National elections upon the presumption that I was a citizen, and my vote has never been challenged.

(Signed) his ADAM x GEIBEL. mark.

Sworn to before me this 30th day of January, 1904.

(Signed) ROBERT OSBORNE, JR.,
Notary Public.

[NOTARIAL SEAL.]

Commission expires January 2, 1905.

745 United States Circuit Court of Appeals, Second Circuit.

In Equity. No. 8127.

WHITE SMITH MUSIC PUBLISHING COMPANY
vs.
APOLLO COMPANY.

It is hereby stipulated and agreed by and between the attorneys for the respective parties hereto that the affidavit of Adam Geibel, sworn to the 30th day of January 1904, on page 236 of the complainant's record in this court, be inserted in the record on appeal of the above entitled action to the United States Circuit Court of Appeals immediately after the last printed page thereof.

Dated New York, April 25th, 1906.

DICKERSON, BROWN, RAEGENER & BINNEY,
Solicitors for Complainant.
WILCOX & BRODEK, *Solicitors for Defendant.*

So ordered.

WM. J. WALLACE, *U. S. C. J.*

Endorsed: White *vs.* Apollo. Order. United States Circuit Court of Appeals Second Circuit. Filed Apr. 26, 1906 William Parkin, Clerk.

746 United States Circuit Court of Appeals for the Second Circuit.

8126.

WHITE SMITH MUSIC PUBLISHING COMPANY, Appellant,
vs.
THE APOLLO COMPANY, Appellee.

Petition of the Automusic Perforating Company to be Heard.

To the Judges of the Circuit Court of Appeals of the United States for the Second Circuit.

Your petitioner the Automusic Perforating Company, respectfully represents that it is a corporation, created and existing in due form of law in the State of New York, and having a place of business at 53 Broadway, New York, and another place of business at 227 Bleeker Street, New York; and that it is pecuniarily interested to a large amount in the decision of this suit; and that if that decision is to be in favor of the appellant, the White-Smith Music Publishing Company, the resulting pecuniary injury to your petitioner will be very great.

Wherefore, your petitioner respectfully prays that your petitioner may be heard by the Court, before any decision in the case is rendered by the Court; and your petitioner also prays for such other relief, as to the Court may appear to be proper.

And, in support and explanation of this petition, your petitioner respectfully represents the following facts:

First. Your petitioner's business consists mainly in making and selling special sheets of perforated paper, for use in automatic
747 musical instruments; which sheets are covered by letters patent of the United States, No. 661,920, granted November 13, 1900, to James O'Connor, and which sheets are usable only with a particular construction in automatic musical instruments, and which construction is also covered by said letters patent.

Second. Your petitioner conducts its business by a contract with each of a number of manufacturers of automatic musical instruments; each of which contracts includes a license to that manufacturer to make and sell that patented construction, in the instruments of the licensee, and includes an agreement for the purchase, by that licensee or its agents, from your petitioner, of all the sheets of perforated paper which are to be sold with or for those instruments, which agreement is occasioned by the fact that the said patented construction in the said instruments, requires the said patented perforated sheets for use therewith.

Third. The property of your petitioner which is employed in its said business, consists of machinery, master sheets, and perforated

sheets, and other tangible personal property, together with the said letters patent; and that tangible personal property had cost the petitioner nearly one hundred thousand dollars; and those letters patent are very valuable to your petitioner's business.

Fourth. The Aeolian Company, of Meriden, Connecticut, is a large and wealthy corporation, which is engaged in making and selling automatic Musical instruments, and in making and selling perforated strips of paper for use in those instruments.

Fifth. There is an association of publishers of sheet music, which association includes nearly all the principal music publishers in the United States, and the members of which association copyright and publish most of the sheet music which is copyrighted and
748 published, from time to time in this country.

Sixth. The Aeolian Company has a contract with each member of said association of music publishers, which contract substantially provides that the Aeolian Company shall have the exclusive right to make and sell perforated sheets of paper, to be used in automatic musical instruments, for producing the music represented by any or all of the copyrighted sheet music published by that publisher; provided the Aeolian Company can and does cause a decree to be obtained in some Federal Court, declaring such a perforated sheet to be an infringement of such a copyright; or, failing to obtain such a decree, provided the Aeolian Company shall succeed in inducing Congress to enact a statute, to subject such perforated sheets to the dominion of such copyrights; but which contract also provides that the Aeolian Company shall not be obliged to make or sell any perforated sheet of paper to be used in producing the music represented by any particular copyrighted sheet music, or pay any royalty thereon, unless it elects to thus make and sell such particular perforated sheet.

Seventh. This action was actually begun, and has been really prosecuted by the Aeolian Company, in the name of the White Smith Music Publishing Company, but at the expense of the Aeolian Company, for the purpose of obtaining such a judicial decree as is contemplated by each of said contracts.

Eighth. If this case is decided in favor of the appellant, all of those contracts will be thereby put into operation, and will operate to give the Aeolian Company the exclusive right to make and sell perforated sheets, for use in automatic musical instruments, to perform most of the music which the owner of such an instrument would desire to have performed thereby. The monopoly of the right to make and sell most of the perforated sheets which the public
749 would wish to buy, would practically result in conferring upon the Aeolian Company a monopoly to make and sell all of the perforated sheets which the public would wish to buy, and also a practical monopoly of making and selling all automatic musical instruments, operated by perforated sheets of paper; because no prospective purchaser of an automatic musical instrument would buy one which could be used by him in playing only a comparatively few tunes, when he could purchase one from the Aeolian Company even at a higher price, for playing all the tunes which he would desire to

have played; and because the Aeolian Company could present this dilemma to every prospective purchaser of an automatic musical instrument, by simply declining to sell any perforated sheets for use in any instrument not made and sold by that company.

Ninth. Your petitioner's said business would probably be quite extinguished by a decision of this suit in favor of the appellant; because such a decision would probably be promptly followed by threats or warnings of suits from the Aeolian Company, sent to all those manufacturers of automatic musical instruments, or their agents, who are now buying from your petitioner all the perforated sheets of paper sold by your petitioner; and which threats or warnings would probably operate to cause all those manufacturers and agents to promptly and permanently discontinue all such purchases from your petitioner, and would thus destroy your petitioner's business of making and selling its patented perforated sheets of paper. And such a destruction of that business would extinguish nearly all the value of your petitioner's said tangible property, and also nearly or quite all the value of your petitioner's said letters patent, and would
750 drive your petitioner out of the business which it has been building up in good faith, on the authority of said letters patent, and in reliance on the decision of his Honor, Judge Colt, in the case of Kennedy *vs.* McTammany, and would also deprive your petitioner of all future profits which it would otherwise derive from that business.

Tenth. Even if the decision of this case in favor of the appellant should not thus result in immediately ruining your petitioner's business, through threats or warnings from the Aeolian Company to your petitioner's customers, that result would doubtless speedily follow from one or more preliminary injunctions, issued against your petitioner, or against some or all of its said customers, on the basis of such a decision of this case.

Wherefore your petitioner again prays, as it has already prayed, that your petitioner may be heard by the Court, before any decision in this case is rendered by the Court, and your petitioner also prays for such other relief, as to the Court may appear to be proper.

AUTOMUSIC PERFORATING CO.,
JAMES O'CONNOR *President.*

ALBERT H. WALKER,
Counsel for Petitioner.

STATE OF NEW YORK, *County of New York, ss:*

James O'Connor being duly sworn, deposes and says That he is the president of the petitioner, the Automusic Perforating Company; and that he has read the foregoing petition and known the contents thereof; and that all the statements in the introduction to said petition, and all those in the first, second and third sections of said petition are true of his own knowledge; and that all its other
751 statements are made on his information and belief, which information was carefully acquired, and which belief is founded upon convincing evidence.

JAMES O'CONNOR.

Subscribed and sworn to before me this nineteenth day of April, 1906.

NARCISO C. DONATO,
[SEAL.] *Notary Public, New York County.*

Endorsed: U. S. Circuit Court of Appeals for the Second Circuit. White Smith Music Publishing Company *vs.* The Apollo Company, No. 8126. Petition of the Automusic Perforating Co. to be heard. United States Circuit Court of Appeals Second Circuit. Filed Apr. 20, 1906. William Parkin, Clerk.

April 20, 1906.—Petition granted. (Open Court.)

752 United States Circuit Court of Appeals for the Second Circuit.

Nos. 216 and 217, October Term, 1905.

Argued April 26, 1906; Decided May 25, 1906.

THE WHITE-SMITH MUSIC PUBLISHING COMPANY, Complainant-Appellant,
vs.
THE APOLLO COMPANY, Defendant-Appellee.

THE WHITE-SMITH MUSIC PUBLISHING COMPANY, Complainant-Appellant,
vs.
THE APOLLO COMPANY, Defendant-Appellee.

Appeals from the Circuit Court of the United States for the Southern District of New York.

Before Judges Lacombe, Townsend and Coxe.

These causes come here upon appeal from a decree of the United States Circuit Court for the Southern District of New York, dismissing bill alleging infringement of copyright. The facts are stated in the opinion of the court below (139 Fed., 427).

Per Curiam:

The questions raised in these cases are of vast importance, and involve far reaching results. They have been exhaustively discussed in the clear and forcible briefs and arguments of counsel. We are of the opinion that the rights sought to be protected by these suits belong to the same class as those covered by the specific provisions of the copyright statutes, and that the reasons which led to the passage of said statutes apply with great force to the protection of
753 rights of copyright against such an appropriation of the fruits of an author's conception as results from the acts of defendant.

But in view of the fact that the law of copyright is a creature of

statute and is not declaratory of the common law, and that it confers distinct and limited rights, which did not exist at the common law, we are constrained to hold that it must be strictly construed, and that we are not at liberty to extend its provisions, either by resort to equitable considerations or to a strained interpretation of the terms of the statute.

We are therefore of the opinion that a perforated paper roll, such as is manufactured by defendant, is not a copy of complainant's staff notation for the following reasons:

It is not a copy in fact; it is not designed to be read or actually used in reading music as the original staff notation is; and the claim that it may be read, which is practically disproved by the great preponderance of evidence, even if true, would establish merely a theory or possibility of use, as distinguished from an actual use. The argument that because the roll is a notation or record of the music it is, therefore, a copy, would apply to the disc of the phonograph or the barrel of the organ, which, it must be admitted, are not copies of the sheet music. The perforations in the rolls are not a varied form of symbols substituted for the symbols used by the author. They are mere adjuncts of a valve mechanism in a machine. In fact, the machine or music playing device is the thing which appropriates the author's property and publishes it by producing the musical sounds, thus conveying the author's composition to the public.

The decree is affirmed with costs.

Charles E. Hughes, for Appellant.
C. S. Burton, for the Appellee.
A. H. Walker, for the Auto-Music Co.

754 At a Stated Term of the United States Circuit Court of Appeals, in and for the Second Circuit, held at the Court Rooms in the Post Office Building in the City of New York, on the 5th day of June one thousand nine hundred and six.

Present: Hon. E. Henry Lacombe, Hon. William K. Townsend, Hon. Alfred C. Coxe, Circuit Judges.

8126.

WHITE SMITH MUSIC PUBLISHING COMPANY, Complainant-Appellant,
vs.
APOLLO COMPANY, Defendant-Appellee.

Appeal from the Circuit Court of the United States for the Southern District of New York.

This cause came on to be heard on the transcript of record from the Circuit Court of the United States, for the Southern District of New York, and was argued by counsel.

On consideration whereof, it is now hereby ordered, adjudged and decreed that the decree of said Circuit Court be and it hereby is affirmed with costs.

W. K. T.

It is further ordered that a Mandate issue to the said Circuit Court in accordance with this decree.

755 Endorsed: United States Circuit Court of Appeals, Second Circuit. White Smith Co. *vs.* Apollo Co. Order for Mandate. United States Circuit Court of Appeals Second Circuit. Filed Jun- 11, 1906 William Parkin, Clerk.

756 At a Stated Term of the United States Circuit Court of Appeals, in and for the Second Circuit, held at the Court Rooms in the Post Office Building in the City of New York, on the 5th day of June one thousand nine hundred and six.

Present: Hon. E. Henry Lacombe, Hon. William K. Townsend, Hon. Alfred C. Coxe, Circuit Judges.

8127.

White Smith Music Publishing Company, Complainant-Appellant,
vs.
Apollo Company, Defendant-Appellee.

Appeal from the Circuit Court of the United States for the Southern District of New York.

This cause came on to be heard on the transcript of record from the Circuit Court of the United States, for the Southern District of New York, and was argued by counsel.

On consideration whereof, it is now hereby ordered, adjudged and decreed that the decree of said Circuit Court be and it hereby is affirmed with costs.

W. K. T.

It is further ordered that a Mandate issue to the said Circuit Court in accordance with this decree.

757 Endorsed: United States Circuit Court of Appeals, Second Circuit. White Smith Co. *vs.* Apollo Co. Order for Mandate. United States Circuit Court of Appeals Second Circuit Filed Jun- 11, 1906. William Parkin, Clerk.

758 United States Circuit Court of Appeals for the Second Circuit.

In Equity. No. 8126.

White-Smith Music Publishing Company, Appellant,
vs.
The Apollo Company, Appellee.

The above-named appellant, White-Smith Music Publishing Company, respectfully shows that the above-entitled cause is now pending in the United States Circuit Court of Appeals, for the Second

Circuit, and that a judgment has therein been rendered on the 25th day of May, 1906, affirming the decree of the Circuit Court of the United States, for the Southern District of New York, and that the matter in controversy in said suit exceeds one thousand dollars, besides costs; that this cause is one in which the United States Circuit Court of Appeals for the Second Circuit has not final jurisdiction, and that it is a proper cause to be reviewed by the Supreme Court of the United States on appeal.

Wherefore, the said appellant prays that an appeal be allowed it in the above-entitled cause, directing the Clerk of the United States Circuit Court of Appeals for the Second Circuit to send the record and proceedings in said cause, with all things concerning the same, to the Supreme Court of the United States in order that the errors com-
plained of in the assignment of errors herewith filed by the
759 said appellant may be reviewed, and if error be found, corrected according to the laws and customs of the United States.

DICKERSON, BROWN, RAEGENER & BINNEY,
Solicitors for Appellant.

760 United States Circuit Court of Appeals for the Second Circuit.

In Equity. No. 8126.

WHITE-SMITH MUSIC PUBLISHING COMPANY, Appellant,
vs.
THE APOLLO COMPANY, Appellee.

It is hereby ordered that the appeal in the above-entitled cause to the Supreme Court of the United States be and is hereby allowed, as prayed.

(Sig.) E. H. LACOMBE,
United States Circuit Judge, Second Circuit.

761 (Endorsed:) U. S. Circuit Court of Appeals for the Second Circuit In Equity #8126 White-Smith Music Publishing Company, Appellant, *vs.* The Apollo Company, Appellee. Appeal to the Supreme Court of the United States. Dickerson, Brown, Raegener & Binney, 141 Broadway, New York. Solicitors for Appellant United States Circuit Court of Appeals, Second Circuit. Filed Sep. 4, 1906. William Parkin, Clerk. Copy of the within received this fourth day of Sept. 1906 Wilcox & Brodeck Solicitors for Appellee.

762 United States Circuit Court of Appeals for the Second Circuit.

In Equity. #8126.

WHITE-SMITH MUSIC PUBLISHING COMPANY, Appellant,
vs.
THE APOLLO COMPANY, Appellee.

The above-named appellant, White-Smith Music Publishing Company, having appealed to the Supreme Court of the United States from the final decree of this Court made and entered in the above-entitled cause and filed in the office of the Clerk of this Court on the 25th day of May, 1906, respectfully alleges and makes the following assignments of errors herein:

I. The Court erred in holding that it was necessary to find that a perforated music sheet or roll, such as is manufactured by defendant, must be a copy of complainant's staff notation in order to violate the complainant's copy-right, and in not holding the contrary thereof.

II. The Court erred in holding that a perforated music sheet or roll, such as is manufactured by defendant, is not a substantial copy of complainant's staff notation, and in not holding the contrary thereof.

763 III. The Court erred in holding that a perforated music sheet or roll, such as is manufactured by defendant, cannot be read as staff notation is, and in not holding the contrary thereof.

IV. The Court erred in failing to hold that a perforated music sheet or roll, such as is manufactured by defendant, can be read without any difficulty with the aid of a templet rule or scale which is an article in common use for the purpose.

V. The Court erred in failing to hold that while in use, a perforated music sheet or roll, such as is manufactured by defendant, is read to a sufficient extent to enable the user to render the composition recorded by the sheet as it was intended to be played.

VI. The Court erred in holding that the perforations of a perforated music sheet or roll, such as is manufactured by defendant, are not a varied form of symbols substituted for the symbols used by the author, and in not holding the contrary thereof.

VII. The Court erred in failing to recognize the existence of a class of music for which perforated music sheets or rolls are the only useful record or notation, because if such music was recorded in staff notation it could not possibly be performed even by a plurality of persons; and further erred in failing to hold that such perforated sheets were within the purview of the United
764 States Statutes relating to copyright.

VIII. The Court erred in failing to recognize the fact that perforated music sheets or rolls, such as are manufactured by defendant, are commonly first made by the author of a musical composition by playing the composition upon a key-board musical instrument having a recording attachment added to it, so that the author thus producing a perforated music sheet, is in fact writing

his musical composition and producing a notation of it, or sheet music which is within the purview of the United States Statutes relating to copyright, and further erred in failing to hold the facts to be as therein stated.

IX. The Court erred in failing to recognize the existence and utility of various mechanisms for automatically recording through the agency of a pencil, pen or cutter, a musical composition while it is being played or improvised, and by failing to recognize the substantial identity of records or notations so made and of perforated music sheets such as are made by defendant, and by failing to conclude upon such facts that perforated music sheets such as are manufactured by defendant are within the purview of the United States Statutes relating to copyright.

X. The Court erred in holding in substance that staff notation is the only record, notation, or sheet music within the purview of the United States Statutes relating to copyright, and in failing
765 to hold that there are numerous other records or notations of varying characters, some of which are substantially identical in every detail with perforated music sheets such as are manufactured by defendants.

XI. The Court erred in holding that the perforations in perforated music sheets or rolls, such as are manufactured by defendant, are mere adjuncts of a valve mechanism in a machine, in view of the fact that they can cause the operation of the valve mechanism in such a way as to produce cacaphony and without playing a musical composition, and in not holding the contrary thereof.

XII. The Court erred in holding that in fact the machine or musical playing device is the thing which appropriates the author's property and publishes it by producing the musical sounds, thus conveying the author's composition to the public, in view of the fact that the machine or mechanical playing device cannot operate so as to play a musical composition unless the perforations of a perforated music sheet or roll, such as is manufactured by defendant, are arranged in such relation to each other as to cause the playing of the proper notes, and in not holding the contrary thereof.

XIII. The Court erred in failing to hold that Section 4966 of the Revised Statutes by inhibiting "the public performance of a copyrighted musical composition without the consent of the proprietor," makes it necessary to construe all sections of the Revised
766 Statutes relating to copyrights as applying not only to a record or tangible expression of it, but also to the musical composition itself, so that it was sufficient for complainant to show that defendant sold any copies or records of a copyrighted musical composition whether such copies or records were like what is commonly termed "staff notation" or not.

XIV. The Court erred in ignoring the fact that staff notation is often copied from perforated sheets of music such as are discussed in the testimony, and therefore that the perforated sheets are copies of music or notation.

XV. The Court erred in holding that defendant had not been guilty of infringement and by failing to hold the contrary thereof.

XVI. The Court erred in holding that complainant is not entitled to enjoin any use to which the perforated paper roll may be put, and in not holding the contrary thereof.

XVII. The Court erred in failing to direct the Circuit Court to grant the relief prayed for in the bill of complaint.

XVIII. The Court erred in affirming the decree of the Court below dismissing the bill of complaint.

(Sig.) EDWIN H. BROWN,
Of Counsel.

767 Endorsed: United States Circuit Court of Appeals for the Second Circuit. In Equity. (8126.) White-Smith Music Publishing Company, Appellant, *vs.* The Apollo Company, Appellee. Appeal to the Supreme Court of the United States. Assignment of Errors. Dickerson, Brown, Raegener & Binney, 141 Broadway, New York, Solicitors for Appellant. United States Circuit Court of Appeals, Second Circuit. Filed Sep. 4, 1906. William Parkin, Clerk. Copy of the within received this fourth day of Sept., 1906. Wilcox & Brodek, Solicitors for Appellee.

768 217,475.

United States Circuit Court of Appeals for the Second Circuit.

In Equity. No. 8126.

WHITE-SMITH MUSIC PUBLISHING COMPANY, Appellant,
vs.
THE APOLLO COMPANY, Appellee.

Know all men by these presents, that we, the American Surety Company of New York, a corporation organized and existing under the laws of the State of New York, of No. 100 Broadway, New York City, are held and firmly bound unto The Apollo Company, in the sum of Two Hundred and Fifty Dollars ($250.), to be paid to the said Apollo Company, for the payment of which well and truly to be made, we bind ourselves, and our successors, firmly by these presents.

Sealed with our seals and dated the 31st day of August, 1906.

Whereas an appeal has been allowed and filed in the Clerk's office of the United States Circuit Court of Appeals for the Second Circuit in the above entitled case to correct the judgment in aforesaid suit and the citation directed to the said The Apollo Company, citing and admonishing it to be and appear at a Supreme Court of the United States, at Washington, in the District of Columbia, within thirty days from the date thereof.

Now, therefore, the condition of this obligation is such, that if the said White-Smith Music Publishing Company shall prosecute said appeal to effect, and answer all damages and costs if it fail to make its plea good, then this obligation shall be void; otherwise we,

the American Surety Company of New York, shall do the same for them.

AMERICAN SURETY COMPANY OF NEW YORK,
By L. E. CARMAN, *Vice-President.*
[L. S.] J. C. DRAPER, JR., *Attorney.*

769 STATE AND COUNTY OF NEW YORK, *ss:*

On this 31st day of Aug. 1906, before me personally appeared L. E. Carman, Vice President of the American Surety Company of New York, to me known, who being by me duly sworn, did depose and say that he resided in Notley, N. J.; that he is the Vice President of the American Surety Company of New York, the Corporation described in and which executed the above instrument; that he knew the corporate seal of said Corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by order of the Board of Directors of said Corporation, and that he signed his name thereto by like order; and that the liabilities of said Corporation do not exceed its assets as ascertained in the manner provided by law. And the said L. E. Carman further said that he was acquainted with J. C. Draper, Jr. and knew him to be one of the Attorneys of said Corporation, that the signature of said J. C. Draper, Jr. subscribed to the said instrument, is in the genuine handwriting of the said J. C. Draper, Jr. and was thereto subscribed by the like order of the said Board of Directors, and in the presence of him the said L. E. Carman Vice President.

JOHN A. MANNING,
[L. S.] *Notary Public, Kings County.*

Certificate filed in New York County.

At a regular quarterly meeting of the Board of Trustees of the American Surety Company of New York, held on the 12th day of April, 1893, the following resolution was adopted and is still in force:

"*Resolved*, That the President and Vice-Presidents be and they hereby are, and each one of them is authorized and empowered to execute and deliver, and attach the seal of the Company to any and all bonds and undertakings for, or on behalf of the Company, in its business of guaranteeing the performance of contracts other than insurance policies, and executing or guaranteeing bonds and undertakings required or permitted in all actions or proceedings by law allowed; such guarantee, bonds and undertakings, however, to be attested in every instance by the Secretary, one of the Assistant Secretaries or one of the Attorneys."

COUNTY OF NEW YORK, *ss:*

I, J. C. Draper, Jr. Attorney of the American Surety Company of New York, have compared the foregoing Resolution with the original

thereof, as recorded in the Minute Book of said Company, and do certify that the same is a correct and true transcript therefrom, and of the whole of said original Resolution.

Given under my hand and the seal of the Company at the City of New York, this 31st day of Aug., 1906.

[L. S.] J. C. DRAPER, JR., *Attorney.*

770 Approved as to form, and also as to sufficiency of sureties, with reservation, however, to the defendant, of the right at any time to examine the proper officers of the Surety Company under oath touching its assets, liabilities and general financial condition.

E. H. LACOMBE,
Circuit Judge.

771 (Endorsed:) United States Circuit Court of Appeals, Second Circuit. Filed Sep. 4, 1906. William Parkin, Clerk. Copy of the within received this 4th day of Sept. 1906. Wilcox & Brodeck Sol'rs for Appellee.

772 United States Circuit Court of Appeals for the Second Circuit.

In Equity. No. 8127.

WHITE-SMITH MUSIC PUBLISHING COMPANY, Appellant,
vs.
THE APOLLO COMPANY, Appellee.

The above-named appellant, White-Smith Music Publishing Company, respectfully shows that the above-entitled cause is now pending in the United States Circuit Court of Appeals, for the Second Circuit, and that a judgment has therein been rendered on the 25th day of May, 1906, affirming the decree of the Circuit Court of the United States, for the Southern District of New York, and that the matter in controversy in said suit exceeds one thousand dollars, besides costs; that this cause is one in which the United States Circuit Court of Appeals for the Second Circuit has not final jurisdiction, and that it is a proper cause to be reviewed by the Supreme Court of the United States on appeal.

Wherefore, the said appellant prays that an appeal be allowed it in the above-entitled cause, directing the Clerk of the United States Circuit Court of Appeals for the Second Circuit to send the record and proceedings in said cause, with all things concerning the same, to the Supreme Court of the United States in order that
773 the errors complained of in the assignment of errors herewith filed by the said appellant may be reviewed, and if error be found, corrected according to the laws and customs of the United States.

DICKERSON, BROWN, RAEGENER & BINNEY,
Solicitors for Appellant.

774 United States Circuit Court of Appeals for the Second Circuit.

In Equity. No. 8127.

WHITE-SMITH MUSIC PUBLISHING COMPANY, Appellant,
vs.
THE APOLLO COMPANY, Appellee.

It is hereby ordered that the appeal in the above-entitled cause to the Supreme Court of the United States be and is hereby allowed, as prayed.

(Sig.) E. H. LACOMBE,
United States Circuit Judge, Second Circuit.

775 (Endorsed:) U. S. Circuit Court of Appeals for the Second Circuit In Equity #8127 White-Smith Music Publishing Company, Appellant, *vs.* The Apollo Company, Appellee Appeal to the Supreme Court of the United States. Dickerson, Brown, Raegener & Binney, 141 Broadway, New York, Solicitors for Appellant United States Circuit Court of Appeals, Second Circuit. Filed Sep. 4, 1906. William Parkin, Clerk. Copy of the within received this fourth day of Sept. 1906 Wilcox & Brodeck Solicitors for Appellee.

776 United States Circuit Court of Appeals for the Second Circuit.

In Equity. #8127.

WHITE-SMITH MUSIC PUBLISHING COMPANY, Appellant,
vs.
THE APOLLO COMPANY, Appellee.

The above-named appellant, White-Smith Music Publishing Company, having appealed to the Supreme Court of the United States from the final decree of this Court made and entered in the above-entitled cause and filed in the office of the Clerk of this Court on the 25 day of May, 1906, respectfully alleges and makes the following assignments of errors herein:

I. The Court erred in holding that it was necessary to find that a perforated music sheet or roll, such as is manufactured by defendant, must be a copy of complainant's staff notation in order to violate the complainant's copyright, and in not holding the contrary thereof.

II. The Court erred in holding that a perforated music sheet or roll such as is manufactured by defendant, is not a substantial copy of complainant's staff notation, and in not holding the contrary thereof.

777 III. The Court erred in holding that a perforated music sheet or roll, such as is manufactured by defendant, cannot be read as staff notation is, and in not holding the contrary thereof.

IV. The Court erred in failing to hold that a perforated music sheet or roll, such as is manufactured by defendant, can be read without any difficulty with the aid of a templet rule or scale which is an article in common use for the purpose.

V. The Court erred in failing to hold that while in use, a perforated music sheet or roll, such as is manufactured by defendant, is read to a sufficient extent to enable the user to render the composition recorded by the sheet as it was intended to be played.

VI. The Court erred in holding that the perforations of a perforated music sheet or roll, such as is manufactured by defendant, are not a varied form of symbols substituted for the symbols used by the author, and in not holding the contrary thereof.

VII. The Court erred in failing to recognize the existence of a class of music for which perforated music sheets or rolls are the only useful record or notation, because if such music was recorded in staff notation it could not possibly be performed even by a plurality of persons; and further erred in failing to hold that such perforated sheets were within the purview of the United States Statutes
778 relating to copyright.

VIII. The Court erred in failing to recognize the fact that perforated music sheets or rolls, such as are manufactured by defendant, are commonly first made by the author of a musical composition by playing the composition upon a key-board musical instrument having a recording attachment added to it, so that the author thus producing a perforated music sheet, is in fact writing his musical composition and producing a notation of it, or sheet music which is within the purview of the United States Statutes relating to copyright, and further erred in failing to hold the facts to be as herein stated.

IX. The Court erred in failing to recognize the existence and utility of various mechanisms for automatically recording through the agency of a pencil, pen or cutter, a musical composition while it is being played or improvised, and by failing to recognize the substantial identity of records or notations so made and of perforated music sheets such as are made by defendant, and by failing to conclude upon such facts that perforated music sheets such as are manufactured by defendant are within the purview of the United States Statutes relating to copyright.

X. The Court erred in holding in substance that staff notation is the only record, notation, or sheet music within the purview of the United States Statutes relating to copyright, and in failing to hold that there are numerous other records or notations of varying
779 characters, some of which are substantially identical in every detail with perforated music sheets such as are manufactured by defendants.

XI. The Court erred in holding that the perforations in perforated music sheets or rolls, such as are manufactured by defendant, are mere adjuncts of a valve mechanism in a machine, in view of the fact that they can cause the operation of the valve mechanism in such as way as to produce cacaphony and without playing a musical composition, and in not holding the contrary thereof.

XII. The Court erred in holding that in fact the machine or musical playing device is the thing which appropriates the author's property and publishes it by producing the musical sounds, thus conveying the author's composition to the public, in view of the fact that the machine or mechanical playing device cannot operate so as to play a musical composition unless the perforations of a perforated music sheet or roll, such as is manufactured by defendant, are arranged in such relation to each other as to cause the playing of the proper notes, and in not holding the contrary thereof.

XIII. The Court erred in failing to hold that Section 4966 of the Revised Statutes by inhibiting "the public performance of a copyrighted musical composition without the consent of the proprietor," makes it necessary to construe all sections of the Revised Statutes relating to copyrights as applying not only to a record or
780 tangible expression of it, but also to the musical composition itself, so that it was sufficient for complainant to show that defendant sold any copies or records of a copyrighted musical composition whether such copies or records were like what is commonly termed "staff notation" or not.

XIV. The Court erred in ignoring the fact that staff notation is often copied from perforated sheets of music such as are discussed in the testimony, and therefore that the perforated sheets are copies of music or notation.

XV The Court erred in holding that defendant had not been guilty of infringement and by failing to hold the contrary thereof.

XVI. The Court erred in holding that complainant is not entitled to enjoin any use to which the perforated paper roll may be put, and in not holding the contrary thereof.

XVII. The Court erred in failing to direct the Circuit Court to grant the relief prayed for in the bill of complaint.

XVIII. The Court erred in affirming the decree of the Court below dismissing the bill of complaint.

(Sig.) EDWIN H. BROWN,
Of Counsel.

781 (Endorsed:) United States Circuit Court of Appeals for the Second Circuit. In Equity. White-Smith Music Publishing Company, Appellant, *vs.* The Apollo Company, Appellee. Appeal to the Supreme Court of the United States. Assignment of Errors. Dickerson, Brown, Raegener & Binney, 141 Broadway, New York. Solicitors for Appellant. United States Circuit Court of Appeals, Second Circuit. Filed Sep. 4, 1906. William Parkin, Clerk. Copy of the within received this fourth day of September 1906. Wilcox & Brodek, Solicitors for Appellee.

782 217,476.

United States Circuit Court of Appeals for the Second Circuit.

In Equity. No. 8127.

WHITE-SMITH MUSIC PUBLISHING COMPANY, Appellant,
against
THE APOLLO COMPANY, Appellee.

Know all men by these presents, That we, the American Surety Company of New York, a corporation organized and existing under the laws of the State of New York, of No. 100 Broadway, New York City, New York, are held and firmly bound unto The Apollo Company, in the sum of Two Hundred and Fifty ($250.00) Dollars, to be paid to the said The Apollo Company, for the payment of which, well and truly to be made, we bind ourselves, and our successors, firmly by these presents.

Sealed with our seals and dated the 31st day of August, 1906.

Whereas, an appeal has been allowed and filed in the Clerk's Office of the United States Circuit Court of Appeals for the Second Circuit, in the above entitled case, to correct the decree rendered against the said appellant in the aforesaid suit, and a citation directed to said, The Apollo Company citing and admonishing it to be and appear at a Supreme Court of the United States at Washington, in the District of Columbia, within thirty days from the date thereof,

Now, therefore, the condition of this obligation is such that if the said White-Smith Music Publishing Company shall prosecute said appeal to effect and answer all damages and costs if it fail to make its plea good, then this obligation shall be void, otherwise we the above-bounden, the American Surety Company of New York, shall *due* the same for them.

AMERICAN SURETY COMPANY OF NEW YORK,
By L. E. CARMAN, *Vice President.*

Attest:—
[L. S.] J. C. DRAPER, JR., *Attorney.*

783 STATE AND COUNTY OF NEW YORK, *ss:*

On this 31st day of Aug. 1906, before me personally appeared L. E. Carman, Vice President of the American Surety Company of New York, to me known, who being by me duly sworn, did depose and say that he resided in *the* Nutley, N. J.; that he is the Vice President of the American Surety Company of New York, the Corporation described in and which executed the above instrument; that he knew the corporate seal of said Corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by order of the Board of Directors of said Corporation, and that he signed his name thereto by like order; and that the liabilities of said Corpora-

tion do not exceed its assets as ascertained in the manner provided by law. And the said L. E. Carman further said that he was acquainted with J. C. Draper, Jr. and knew him to be one of the Attorneys of said Corporation, that the signature of said J. C. Draper, Jr. subscribed to the said instrument, is in the genuine handwriting of the said J. C. Draper, Jr. and was thereto subscribed by the like order of the said Board of Directors, and in the presence of him the said L. E. Carman, Vice President.

[L. S.] JOHN A. MANNING,
Notary Public, Kings County.

Certificate filed in New York County.

At a regular quarterly meeting of the Board of Trustees of the American Surety Company of New York, held on the 12th day of April, 1893, the following resolution was adopted and is still in force:

"*Resolved,* That the President and Vice-Presidents be and they hereby are, and each of them is authorized and empowered to execute and deliver, and attach the seal of the Company to any and all bonds and undertakings for, or on behalf of the Company, in its business of guaranteeing the performance of contracts other than insurance policies, and executing or guaranteeing bonds and undertakings required or permitted in all actions or proceedings by law allowed; such guarantee, bonds and undertakings, however, to be attested in every instance by the Secretary, one of the Assistant Secretaries or one of the Attorneys."

COUNTY OF NEW YORK, *ss:*

I, J. C. Draper, Jr. Attorney of the American Surety Company of New York, have compared the foregoing Resolution with the original thereof, as recorded in the Minute Book of said Company, and do certify that the same is a correct and true transcript therefrom, and of the whole of said original Resolution.

Given under my hand and the seal of the Company at the City of New York, this 31st day of Aug., 1906.

[L. S.] J. C. DRAPER, JR., *Attorney.*

784 Approved as to form, and also as to sufficiency of sureties with reservation, however, to the defendant, of the right at any time to examine the proper officers of the Surety Company under oath touching its assets, liabilities and general financial condition.

E. H. LACOMBE,
Circuit Judge.

785 (Endorsed:) United States Circuit Court of Appeals, Second Circuit. Filed Sep. 4, 1906. William Parkin, Clerk. Copy of the within received this 4th day of Sept. 1906. Wilcox & Brodeck Sol'rs for Appellee.

786 UNITED STATES OF AMERICA,
Southern District of New York, ss:

I, William Parkin, Clerk of the United States Circuit Court of Appeals for the Second Circuit, do hereby Certify that the foregoing pages, numbered from 1 to 785 inclusive, contain a true and complete transcript of the record and proceedings had in said Court, in the case of White-Smith Music Publishing Co. against Apollo Company (2 cases) as the same remain of record and on file in my office.

In Testimony Whereof, I have caused the seal of the said Court to be hereunto affixed, at the City of New York, in the Southern District of New York, in the Second Circuit, this 24th day of September in the year of our Lord One Thousand Nine Hundred and Six and of the Independence of the United States the One Hundred and thirty-first.

[Seal United States Circuit Court of Appeals, Second Circuit]

WM. PARKIN, *Clerk.*

787 217,475.

United States Circuit Court of Appeals for the Second Circuit.

In Equity. No. 8126.

WHITE-SMITH MUSIC PUBLISHING COMPANY, Appellant,
vs.
THE APOLLO COMPANY, Appellee.

To Apollo Company:

You are hereby cited and admonished to be and appear in the Supreme Court of the United States, at the City of Washington, in the District of Columbia, thirty (30) days after the date of this citation, pursuant to an appeal allowed and filed in the Clerk's office of the United States Circuit Court of Appeals, for the Second Circuit, wherein White-Smith Music Publishing Company is appellant and you are appellee, to show cause, if any there be, why the decree rendered against the said appellant, as in said appeal mentioned, should not be corrected, and why speedy justice should not be done the parties in that behalf.

Witness the Hon. E. H. Lacombe, Judge of the United States Circuit Court of Appeals for the Second Circuit, this 31st day of Aug., A. D. 1906. E. H. LACOMBE,

Judge United States — Court of Appeals, — Circuit.

788 [Endorsed:] 2502. Original. U. S. Circuit Court of Appeals for the Second Circuit In Equity. # 8126. White-Smith Music Publishing Company, Appellant, *vs.* The Apollo Company, Appellee. Citation to Appellee. Dickerson, Brown, Raegener & Binney, 141 Broadway, New York, Solicitors for Appellant. United States Circuit Court of Appeals, Second Circuit. Filed Sep. 4, 1906. William Parkin, Clerk. Copy of the within received this 4th day of Sept., 1906. Wilcox & Brodek, Solicitors for Appellee.

789 217,476.

United States Circuit Court of Appeals for the Second Circuit.

In Equity. No. 8127.

WHITE-SMITH MUSIC PUBLISHING COMPANY, Appellant,
vs.
THE APOLLO COMPANY, Appellee.

To Apollo Company:

You are hereby cited and admonished to be and appear in the Supreme Court of the United States, at the City of Washington, in the District of Columbia, thirty (30) days after the date of this citation, pursuant to an appeal allowed and filed in the Clerk's office of the United States Circuit Court of Appeals, for the Second Circuit, wherein White-Smith Music Publishing Company is appellant and you are appellee, to show cause, if any there be, why the decree rendered against the said appellant, as in said appeal mentioned, should not be corrected, and why speedy justice should not be done the parties in that behalf.

Witness the Hon. E. H. Lacombe, Judge of the United States Circuit Court of Appeals for the Second Circuit, this 31st day of Aug., A. D. 1906.

E. H. LACOMBE,
Judge United States — Court of Appeals, — Circuit.

790 [Endorsed:] 2503 Original U. S. Circuit Court of Appeals for the Second Circuit In Equity # 8127 White-Smith Music Publishing Company, Appellant, *vs.* The Apollo Company, Appellee. Citation to Appellee. Dickerson, Brown, Raegener & Binney, 141 Broadway, New York. Solicitors for Appellant. United States Circuit Court of Appeals, Second Circuit. Filed Sep. 4 1906 William Parkin, Clerk. Copy of the within received this fourth day of Sept. 1906 Wilcox & Brodek Solicitors for Appellee.

Endorsed on cover: File No. 20,382. U. S. Circuit court appeals, 2d circuit. Term No. 110. White-Smith Music Publishing Company, appellant, *vs.* Apollo Company. File No. 20,383. Term No. 111. White-Smith Music Publishing Company, appellant, *vs.* Apollo Company. Filed September 29th, 1906. File Nos. 20,382 and 20,383.

Petition for Certiorari.

Supreme Court of the United States

OCTOBER TERM, 1907.

No. 110 ON APPEAL.

Notice of Motion and Petition of White-Smith Music Publishing Co., for its Petition for Writ of Certiorari directed to the United States Circuit Court of Appeals for the Second Circuit and the United States Circuit Court for the Southern District of New York to bring before the said Supreme Court the case of

WHITE-SMITH MUSIC PUBLISHING CO.

vs.

APOLLO CO.

LIVINGSTON GIFFORD,

Of Counsel for Petitioner.

E. A. Stephens, Printer and Custom House, N. Y.

Supreme Court of the United States,

OCTOBER TERM, 1907.

IN THE MATTER

OF

The Petition of WHITE-SMITH MUSIC PUBLISHING CO. for a Writ of *Certiorari* directed to the United States Circuit Court of Appeals for the Second Circuit and to the United States Circuit Court for the Southern District of New York to bring before the said Supreme Court the case of WHITE-SMITH MUSIC PUBLISHING CO. vs. APOLLO COMPANY.

TO APOLLO COMPANY, DEFENDANT, AND CHARLES S. BURTON, ESQ., OF COUNSEL FOR DEFENDANT.

Please take notice that upon the copy of the Transcript of Record herein which is already in this Court on appeal and upon the annexed petition of the complainant, I shall move before the Supreme Court of the United States at the Capitol in the City of Washington, D. C., at the hearing of the defendant's motion to dismiss the appeal herein, for the grant of the prayer of the annexed petition for *certiorari* and for such other and further relief as to the Court may seem just.

Dated New York, Nov. 1907.

Yours etc.,

Of Counsel for Petitioner.

decree in said cause dismissing the bill of complaint for want of equity.

THIRD. Your petitioner thereupon filed an appeal to the United States Circuit Court of Appeals for the Second Circuit, which appeal was allowed August 14, 1905.

FOURTH. The cause came on to be heard in said Circuit Court of Appeals before their Honors Judges LACOMBE, TOWNSEND and COXE and on or about May 25, 1906, the said Court filed an opinion *per curiam* pursuant to which the said Court entered a decree June 11, 1906, affirming the decree of the Circuit Court.

FIFTH. Your petitioner thereupon filed an appeal to the Supreme Court of the United States, which appeal was allowed September 4, 1906, and the transcript of the record was duly sent to and filed in the Supreme Court of the United States and the cause docketed therein for the October Term 1906.

SIXTH. Said cause was not reached for hearing during the October Term 1906 and is now No. 110 on the docket of the Supreme Court for the October Term 1907, and is ready for hearing; the transcript of the record having been duly printed.

SEVENTH. On or about Sept. 24, 1907, counsel for said Apollo Company served on counsel for your petitioner a notice of motion for October 21, 1907, to dismiss said appeal for lack of jurisdiction, and on October 21, 1907, said motion was presented and affidavits and briefs filed, respectively, in support of and in opposition thereto, but the Court postponed the hearing of said motion until the hearing of the cause on the merits.

EIGHTH. Your petitioner is advised and believes that said motion to dismiss the appeal is without merit and will be denied, but your petitioner is also advised that it is in accordance with precedent and practice in this Court that your petitioner should file this petition for *certiorari* to the end that this Court may have the cause properly before it, either by appeal or by *certiorari* as may seem most proper and therefore may proceed to determine it upon the merits, as in the cases of Pullman Co. v. Transportation Co. 171 U. S. 138; Montana Co. v. St. Louis Co., 204 U. S. 204, and others.

NINTH. Your petitioner is advised and believes that the said judgment of the United States Circuit Court of Appeals and Circuit Court is erroneous and that this Honorable Court should review the same on *certiorari*, if not on appeal, under and in conformity with the provisions of Section 6 of the Act of Congress approved March 3, 1891, and your petitioner avers that said judgment erroneously interprets the copyright statute of the United States and erroneously holds that the defendant's embodiment of said musical composition in the form of a perforated paper roll with the order of the notes embodied in the order of the perforations is not an infringement of said copyright in contemplation of said statute.

TENTH. This cause is of public and general interest for the following reasons, to wit :

(a) One of the questions at issue is the interpretation of a portion of the copyright statute of the United States that has never been interpreted by this Court, namely : the interpretation of the term " musical composition " and what constitutes an infringement thereof, as employed in Section 4952 and other sections of the Revised Statutes.

(b) Another question raised by briefs filed with the leave of this Court is whether said copyright statute would be constitutional if interpreted to cover perforated music as an infringement.

(c) Congress is awaiting the decision by this Honorable Court of this and the case coupled herewith for the purpose of settling the interpretation of the existing copyright act before proceeding to amend the same. This appears by the report of the House Committee on Patents No. 7083 of the Second Session of the 59th Congress submitted January 30, 1907, stating in reference to this cause and the cause coupled herewith : " A case involving the right to " reproduce by mechanical means any copyrighted musical compo- " sition is pending before the Supreme Court of the United States " and your Committee felt that further legislation regarding this " matter should be postponed until we could know what construc- " tion the Court will give to the existing law." This report was made after the Committees of the two Houses of Congress had long been engaged in studying the copyright laws of the United States with a view to the enactment of a revised and consolidated copyright act, involving many hearings and numerous arguments, at which were present more than 80 representatives of innumerable

interests from all parts of the United States, inclusive of composers, publishers, dealers and manufacturers; said hearings having taken place on June 6, 7, 8, 9 and December 7, 8, 10, 11, 1906, and the record thereof printed by Congress comprising over 650 pages.

(*d*) Petitions have been presented to this Court and granted for permission to file briefs by Mr. Albert H. Walker, representing the Connorized Music Company, and by Mr. Nathan Burkan, representing Victor Herbert, the composer of more than 75 compositions, the copyrights on which are being infringed by said Apollo Company if the construction of the statute contended for by your petitioner shall be sustained by this Honorable Court.

(d) The infringement of copyrighted musical compositions in the form of perforated music has increased with great rapidity and to very large proportions and this cause and the cause coupled herewith have been regarded by all parties interested in the question as test cases; no other cases having been commenced or prosecuted to test said question for this reason. A very large amount of money and time has been devoted to the bringing of these cases through the lower Courts to this Honorable Court. It would be a great hardship, not only to your petitioner, but to all others interested in the determination of this question, if by reason of the dismissal of these appeals the question should be relegated to litigating over again through the lower Courts in such manner as to overcome the formal objections raised as a ground for the motions to dismiss these appeals.

(e) There is evidence in the record of this case showing that during the year 1902, from 1,000,000 to 1,500,000 rolls of perforated music were made in the United States (testimony of James H. White, R. p. 61) and that one concern has sold between 5,000,000 and 10,000,000 rolls of perforated music and has published in the form of such rolls 10,000 different musical compositions (testimony of Francis L. Young, R. pp. 147, 148). In 1900, the annual production of 6382 piano players, piano playing attachments and self-playing pianos was reported by the census (12th Census Manufacturers Vol. IV, p. 451). In 1905, the annual production of the same instruments had increased to 22502 (Bulletin 82 Census of Manufacturers 1905, p. 16). The complainant's exhibit Apollo catalogue shows copies of 287 different composers.

(f) It appears by the testimony in this case (R. pp. 151, 135, 133, 102) that the composer sometimes, by the use of a perforating attachment to the piano, expresses his composition in perforated music directly, without writing it in staff notation at all, and

that many compositions are being made which can only be played through the medium of perforated music.

(*g*) The general importance of this question was expressly recognized in the opinion of the Circuit Court of Appeals saying (R. p. 489): "The questions raised in these cases are of vast importance and involve far-reaching results. * * * We are of the "opinion that the rights sought to be protected by these suits be"long to the same class as those covered by the specific provisions "of the copyright statutes, and that the reasons which led to the "passage of said statutes apply with great force to the pro"tection of the rights of copyright against such an appropriation "of the fruits of an author's conception as results from the act of "defendant."

(*h*) The opinion of the Circuit Court of Appeals suggests that probably that Court fully expected this question to come before this Honorable Court on appeal of these cases, because it will be observed that the opinion of the Circuit Court of Appeals is merely a *per curiam* decision, less than a page in length, and containing no review or discussion of the authorities whatsoever.

ELEVENTH. Your petitioner therefore avers that whichever way these cases may be decided, it is of the utmost importance, not merely to the litigants herein, but to all persons interested directly or indirectly in music that the question as to whether the present statute covers perforated music, or whether it is necessary for Congress to amend the same for that purpose, should be determined by this Honorable Court at this time without the delay that would be incurred by commencing all over again in the lower Courts.

TWELFTH. Wherefore, your petitioner respectfully prays that this Honorable Court review this case on *certiorari* forthwith or otherwise as may seem proper and that the transcript of the record already in this Court and printed may be used and taken as the record of this cause for the purposes of such review.

And your petitioner as in duty bound will ever pray, etc.

WHITE SMITH MUSIC PUBLISHING COMPANY,
by WALTER M. BACON,
Treasurer.

LIVINGSTON GIFFORD,
Of Counsel for Petitioner.

STATE OF MASSACHUSETTS, County of Suffolk, } ss:

WALTER M. BACON being duly sworn deposes and says that he is Treasurer of the above petitioner; that he has read the foregoing petition and knows the contents thereof and the facts therein set forth are true to the best of his knowledge and belief.

WALTER M. BACON.

Subscribed and sworn to before me this 31st day of October 1907.

WALTER A. STONE,
Notary Public. [SEAL.]

Supreme Court of the United States,

OCTOBER TERM, 1907.

IN THE MATTER

OF

The Petition of WHITE-SMITH MUSIC PUBLISHING CO. for a Writ of *Certiorari* directed to the United States Circuit Court of Appeals for the Second Circuit and to the United States Circuit Court for the Southern District of New York to bring before the said Supreme Court the case of WHITE-SMITH MUSIC PUBLISHING CO. vs. APOLLO COMPANY.

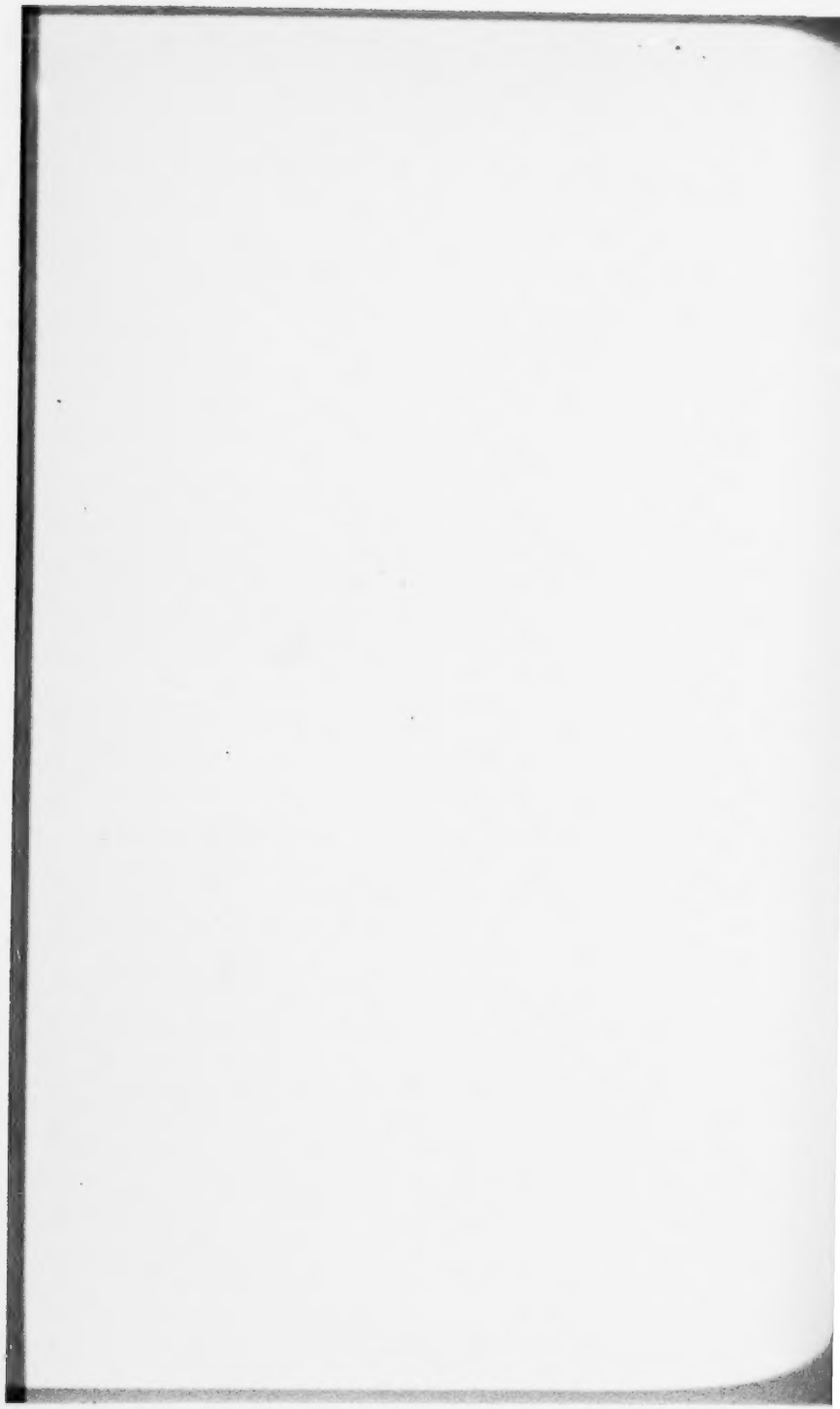
TO APOLLO COMPANY, DEFENDANT, AND CHARLES S. BURTON, ESQ., OF COUNSEL FOR DEFENDANT.

Please take notice that upon the copy of the Transcript of Record herein which is already in this Court on appeal and upon the annexed petition of the complainant, I shall move before the Supreme Court of the United States at the Capitol in the City of Washington, D. C., at the hearing of the defendant's motion to dismiss the appeal herein, for the grant of the prayer of the annexed petition for *certiorari* and for such other and further relief as to the Court may seem just.

Dated New York, Nov. 1907.

Yours etc.,

Of Counsel for Petitioner.



Supreme Court of the United States.

OCTOBER TERM, 1907.

WHITE-SMITH MUSIC PUBLISHING CO., Complainant-Petitioner, vs. APOLLO CO., Defendant.	No. 111 on appeal.

The petition of White-Smith Music Publishing Company for review by the Supreme Court on *certiorari* of the judgment of the United States Circuit Court of Appeals for the Second Circuit and the United States Circuit Court for the Southern District of New York, in the case of White-Smith Music Publishing Company against The Apollo Company.

Your petitioner, White-Smith Music Publishing Company, respectfully shows to this Court as follows, to wit:

FIRST. On June 2, 1902, your petitioner filed in the United States Circuit Court for the Southern District of New York, its bill of complaint against the Apollo Company alleging that your petitioner was the exclusive owner of a copyright of the United States on the musical composition "Kentucky Babe" securing to it for the term of 28 years from the 25th day of November, 1896, the sole liberty of printing, reprinting, publishing, completing, copying, executing, finishing and vending the said musical composition and likewise the exclusive right to dramatize and translate the same and alleging that said Apollo Company had infringed upon said copyright and the exclusive rights of your petitioner thereunder and praying for an injunction and an accounting.

SECOND. Upon final hearing of said cause, his Honor Judge HAZEL holding the United States Circuit Court for the Southern District of New York on or about the 6th day of October 1904, entered a

decree in said cause dismissing the bill of complaint for want of equity.

THIRD. Your petitioner thereupon filed an appeal to the United States Circuit Court of Appeals for the Second Circuit, which appeal was allowed August 14, 1905.

FOURTH. The cause came on to be heard in said Circuit Court of Appeals before their Honors Judges LACOMBE, TOWNSEND and COXE and on or about May 25, 1906, the said Court filed an opinion *per curiam* pursuant to which the said Court entered a decree June 11, 1906, affirming the decree of the Circuit Court.

FIFTH. Your petitioner thereupon filed an appeal to the Supreme Court of the United States, which appeal was allowed September 4, 1906, and the transcript of the record was duly sent to and filed in the Supreme Court of the United States and the cause docketed therein for the October Term 1906.

SIXTH. Said cause was not reached for hearing during the October Term 1906 and is now No. 111 on the docket of the Supreme Court for the October Term 1907, and is ready for hearing; the transcript of the record having been duly printed.

SEVENTH. On or about Sept. 24, 1907, counsel for said Apollo Company served on counsel for your petitioner a notice of motion for October 21, 1907, to dismiss said appeal for lack of jurisdiction, and on October 21, 1907, said motion was presented and affidavits and briefs filed, respectively, in support of and in opposition thereto, but the Court postponed the hearing of said motion until the hearing of the cause on the merits.

EIGHTH. Your petitioner is advised and believes that said motion to dismiss the appeal is without merit and will be denied, but your petitioner is also advised that it is in accordance with precedent and practice in this Court that your petitioner should file this petition for *certiorari* to the end that this Court may have the cause properly before it, either by appeal or by *certiorari* as may seem most proper and therefore may proceed to determine it upon the merits, as in the cases of Pullman Co. v. Transportation Co. 171 U. S. 138; Montana Co. v. St. Louis Co., 204 U. S. 204, and others.

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TWELFTH. Wherefore, your petitioner respectfully prays that this Honorable Court review this case on *certiorari* forthwith or otherwise as may seem proper and that the transcript of the record already in this Court and printed may be used and taken as the record of this cause for the purposes of such review.

And your petitioner as in duty bound will ever pray, etc.

WHITE SMITH MUSIC PUBLISHING COMPANY,
by WALTER M. BACON,
Treasurer.

LIVINGSTON GIFFORD,
Of Counsel for Petitioner.

STATE OF MASSACHUSETTS, County of Suffolk, } ss:

WALTER M. BACON being duly sworn deposes and says that he is Treasurer of the above petitioner; that he has read the foregoing petition and knows the contents thereof and the facts therein set forth are true to the best of his knowledge and belief.

WALTER M. BACON.

Subscribed and sworn to before me this 31st day of October 1907.

WALTER A. STONE,
Notary Public. [SEAL.]

Supreme Court of the United States.

OCTOBER TERM, 1907.

Nos. 110 and 111.

WHITE-SMITH MUSIC PUBLISHING CO.,
Complainant-Appellant,

vs.

APOLLO CO.,
Defendant-Appellee.

BRIEF FOR APPELLANT.

LIVINGSTON GIFFORD,
Of Counsel for Appellant.

C. G. Burgoyne, Walker and Centre Streets, N. Y.

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Supreme Court of the United States,

OCTOBER TERM, 1907.

WHITE-SMITH MUSIC PUBLISHING COMPANY, Complainant-Appellant, AGAINST APOLLO COMPANY, Defendant-Appellee.	No. 110 "Little Cotton Dolly."
SAME vs. SAME.	No. 111 "Kentucky Babe."

BRIEF FOR APPELLANT.

Statement.

These are appeals from decrees of Judge HAZEL in the Circuit Court for the Southern District of New York filed August 4th, 1905, dismissing the bills for want of equity and affirmed by the Circuit Court of Appeals for the Second Circuit composed of Judges LACOMBE, TOWNSEND and COXE.

The suits were brought to restrain the infringement of the copyrights in the musical compositions entitled respectively "Little Cotton Dolly" and "Kentucky Babe." Both cases present the

same principal question and, aside from the formal proof as to the respective copyrights, the evidence is the same.

The appellant, a Massachusetts corporation, is a publisher of music. The appellee, a New Jersey corporation, is engaged in the sale of the p ano-player and player piano known as the "Apollo" (illustrated *post* p. 71), and of perforated music. Illustrations of it in both forms are to be found at the end of this brief.

The bill in suit Number 110 sets forth (R., p. 1) that the appellant, as the assignee of Adam Geibel, the composer, on due compliance with the statute, obtained on or about May 17th, 1897, a copyright in a musical composition known as "Little Cotton Dolly;" that the composition is of large value, and that the appellee has been guilty of infringement by the publication and sale of copies.

Similar allegations are made (R., p. 17) in suit Number 111 as to the composition known as "Kentucky Babe," also composed by Adam Geibel.

The answer in each case (R., p. 288) admits that the appellee is a corporation, denies any knowledge or information as to the appellant's title to the copyright, and denies the other allegations of the bill.

The two cases were heard together both in the Circuit Court and in the Circuit Court of Appeals. The opinion of the Circuit Court appears in this record, at page 472, and is reported (139 Fed., 427). The opinion of the Circuit Court of Appeals is at page 489 of this re ord, and is reported (147 Fed., 226).

The contention of the complainant-appellant is that it has established, by the proofs, all the legal prerequisites to the validity of each of the copyrights and its title to all the exclusive rights thereby intended to be secured; and that the defendant-appellee has infringed these exclusive rights, and particularly by the sale of the copyrighted musical compositions in the form of perforated music.

The contention of the defendant-appellee has been (1) that in the Little Cotton Dolly case the complainant has failed to establish any exclusive right to anything, because not the proprietor at the time it applied therefor; also, (2) that in both cases complainant has failed to prove infringement if a copyright on a musical composition cannot be infringed by perforated music.

The point has also been raised by outside parties that the copyright law would be unconstitutional and the copyrights invalid if interpreted so as to cover perforated music and this point was re-

ferred to in the opinion of the Circuit Court (p. 474, R.), to which opinion the Circuit Court of Appeals has referred for the facts, saying (p. 489, R.): "The facts are stated in the opinion of the court below."

Errors Relied Upon.

The assignment of errors (pp. 493, 494 R.) substantially covers, with added details, the following:

1. The Circuit Court of Appeals erred in not holding, as did the Circuit Court (p. 473, R.), that "it is sufficiently established by the "evidence that the complainant had the exclusive right as proprie- "tor to multiply copies of the copyrighted musical composition "and to expose the same for sale;" or in other words, that both copyrights are valid and exclusively owned by complainant.

2. Both the Circuit Court of Appeals and the Circuit Court erred in holding that the copyrights are not infringed by the sale of the same musical compositions in the form of perforated music.

3. The Circuit Court erred in holding (p. 474, R.), that the copyright law would be unconstitutional and the copyrights in suit invalid if interpreted to include musical compositions in the form of perforated music; and the Circuit Court of Appeals erred in not reversing such holding.

PART I.

ARGUMENT ON THE FACTS.

Proof of Facts Prerequisite to Validity of the Copyrights and Appellant's Title Thereto.

Section 4956 of the Revised Statutes provides that: "No person "shall be entitled to a copyright unless he shall, on or before the "day of publication, in this or any foreign country, deliver at the "office of the Librarian of Congress, * * * a printed copy of "the * * * musical composition * * * for which he desires "a copyright; nor unless he shall also, not later than the day "of publication thereof, in this or any foreign country, deliver at "the office of the Librarian of Congress at Washington, District "of Columbia, or deposit in the mail within the United States, "addressed to the Librarian of Congress, at Washington, District "of Columbia, two copies of such * * * musical composition."

The answer put in issue the validity of the copyrights by denying (R., p. 289), the averments of the bill that the above prerequisites had been complied with, thus necessitating the following proof of validity.

The music of "Little Cotton Dolly" was composed by Adam Geibel (R. p. 57) and the words were written by Richard H. Buck (p. 38, R.). Both Geibel and Buck were citizens of the United States (p. 156, R.). On May 15th, 1897, the appellant as proprietor, through transfer from the owners (pp. 13, 38, 96, R.; Ex. 3, p. 159, R.), deposited in the mail at Boston, duly addressed to the Librarian of Congress, a printed copy of the title and two copies of the musical composition, together with the statutory fees (pp. 5, 14, 22, 31, R.; Exs. 4, 6, p. 160, R.). The Librarian of Congress acknowledged receipt and recorded the copyright on May 17th, 1897 (p. 13, R.; Exs. 7, 8, pp. 161, 162, R.), the day of first publication (p. 14, R.; see also pp. 38, 155, R.). Copies sold have contained due notice of copyright in accordance with the statute (pp. 22, 30, R.).

The originality of the composition has been sufficiently shown (p. 57, R.) and is not questioned. Mr. Geibel is a composer of high repute, whose name gives value to his work (pp. 6, 7, 11, R.), and "Little Cotton Dolly" is a composition of merit (pp. 7, 13, R.)

which has been conspicuously successful. In addition to the song arrangement, it has been arranged as a quartette, schottische, for the banjo, for the mandolin and piano and also for the mandolin and guitar (pp. 7 and 9, R.). About 20,000 copies of the various arrangements have been sold (pp. 5, 15, 16, R.; Exs. 9, 10, p. 163, R.) and they are still in active sale (pp. 5, 6, R.). Royalties have been paid by the appellant to Mr. Geibel upon all the arrangements except the quartette (pp. 9, 10, R.).

Corresponding proof exists as to "Kentucky Babe" (R., p. 21 to 31, 155–6).

Proof of Infringing Sales.

It is admitted that the perforated music "Little Cotton Dolly," marked "Complainant's Exhibit 12," was sold by the appellee to C. H. Shaw on May 16, 1902 (p. 37, R.; see also Receipt, Ex. 13, p. 164, R.).

This perforated music was made by the Q. R. S. Company, an Illinois corporation doing business at Chicago (pp. 35, 315 R.). All the perforated music made by this company is sold to the Melville-Clark Piano Company also an Illinois corporation, with which the former is closely associated (pp. 315, 331, 332, R.). The appellee obtains the perforated music from the Melville-Clark Company, having a license for the New England States, except Connecticut and the City of Boston, and for New York and New Jersey (p. 37, R.).

The Q. R. S. Company publishes a catalogue of music for the "Apollo" and "Apollo Grand" piano-players containing the perforated music "Little Cotton Dolly" (pp. 315, 316, R., "Apollo Catalogue"). Down to the time of the commencement of this suit, the appellee offered for sale the perforated music in question, and in its catalogue or price list of music so offered it was numbered and described as follows: "4559, Little Cotton Dolly—Plantation Lullaby (C) A. Geibel, $1.80" (pp. 33, 34, R.; Ex. 11, p. 287, R.).

Corresponding proof exists as to "Kentucky Babe" (R., p. 315, 36).

About the time this suit was begun these compositions were withdrawn from the catalogue under advice of counsel (p. 36, R.).

Facts Bearing on the Question Whether the Defendant's Perforated Music Infringes.

I. *Appellee's perforated music represents exclusively the musical composition copyrighted by the appellant and depends for its value upon the quality and popularity thereof.*

The identity of the composition is definitely asserted by the appellee's catalogue (pp. 33, 34, R.). It is estalished by the uncontroverted testimony of Professor Gow (pp. 38, 39, R.) and Mr. Gunz (pp. 107, 125 R.) that the musical composition identified by the order of the notes in the staff notation and that embodied in the order of the notes of the perforated music are the same. And it is obvious that although, in addition to the embodiment of the order of notes of the musical composition, the perforated sheet when used in an Apollo performs also a mechanical function, nevertheless that mechanical function would be substantially valueless if the notes were not in the order of a musical composition.

"The value of a perforated music sheet 'is not determined "by the material of which it is made, nor its size, but is determined "entirely by the quality, popularity and worth of the composition, "*per se*' (pp. 96, 97, R.). While it costs more to make a 'long "sheet' than a 'short one,' as more labor is required, and the "selling price is somewhat greater in the former case, 'the music "sheets' (*i. e.*, perforated music sheet) 'are always procured and "purchased for their musical value, that is, for their worth as a "record of the music desired; and hence a composition that is very "popular and in great demand makes the music sheet of this com-"position much more valuable than that of others which are not in "so great a demand'" (pp. 97, 148, 396, R.).

II. *In the production of appellee's perforated music the staff notation of the copyrighted musical composition was actually followed, and the perforated notes, by appropriate measurements, were made to correspond with the order of the notes indicated by the staff notation.*

A musical composition is the *order of the notes*, just as this court defined a literary composition as the *order of the words* in Holmes vs. Hurst, 174 U. S., 86.

Of course a literary composition contains as secondary characteristics such things as punctuation, paragraphing, capitals italics, &c., and also a musical composition contains such secondary characteristics as staff lines, bars, &c., but in each case the foundation distinction is the order of the words or notes. The words and notes, individually, are old and they have been combined before, but in a different *order*. The *order* is the novelty of the combination in both cases.

Each individual note is characterized by pitch and time. Notes differ from each other sometimes in pitch only, sometimes in time only, and sometimes in both pitch and time. In both perforated notation and staff notation the pitch is represented by the position of the note and the time by the form of the note. The higher the pitch of a note the higher is its location in staff notation and the further is its location removed from one edge of the Apollo roll. The longer the time of the note the longer the form of the perforation.

The total staff is divided into two parts—the treble staff and the base staff. Each part (omitting the short leger lines above and below) consists of five lines with four intermediate spaces. The function of these staff lines is to aid the eye of the reader in seeing the position of the notes relative to each other by which relative position the pitch of the note is indicated. The order of the notes would be the same, and therefore the composition would be the same, though more difficult to read, if the staff lines were omitted, as was done in some notations (*post*, p. 13). So in perforated music, if parallel lines were drawn along the perforations (Exh. Young Roll No. 2) they would aid the eye to determine the relative position of the perforated notes just as the staff lines do for ordinary notes.

Appellee's witnesses call the perforations "notes" (R., p. 395, Q. 10) and call the perforated rolls "music" (R., pp. 76, 296, 297, 315). Appellee's catalogue is entitled "Catalogue of Music" and is divided into "Classic," "Operatic," "Dance," "Songs," "Transcriptions" and "Accompaniments," the same as catalogues of staff notation music. It identifies the different compositions by the names of the music and of the composer. It names 287 different composers (see Complts. Exh. Apollo Catalogue).

The "Apollo" piano player sold by the appellee has a "tracker board" (*i. e.*, the perforated bar over which the sheet runs in passing from one roll to the other) with fifty-eight apertures or ducts

arranged horizontally in regular chromatic order corresponding to the keys of the piano (pp. 303, 384, 385, R.).

Ernest C. Clark, one of the appellee's witnesses, thus describes the process by which the perforated music of "Little Cotton Dolly" was made (p. 315, R.). The attention of the Court is called to the fact that in this process *the order of the notes was exactly copied.*

FIRST STEP. With the score or staff notation music before him, the "arranger," with the aid of a "rule or guide" and a "graduated schedule," marks upon a sheet of paper the position and size of the perforations needed to correspond to the order of notes of the composition (p. 300, R.). An exhibit marked "First Step" shows the sheet at this stage (p. 310, R.). On the "rule or guide" "are marked at regular intervals the letters of the scale and their relative octaves to guide the arranger in placing the note or notes in their proper position" (p. 300, R.). The scale "extends from C to A, C being the lowest and A the highest note, and on this guide, in addition to the regular lettered graduations, appear the lines designating the octaves. The scale is marked in chromatic graduations, therefore, taking full and half steps or intervals" (p. 311, R.). The "graduated schedule" is a device used in producing the desired length of the note or rest (p. 300, R.), and also to secure a correspondence in the perforations to the marks on the score known as "slurs," "ties," "turns," "trills," etc. (pp. 311, 312, R.).

SECOND STEP. This marked sheet is "passed into the hands of an operator who, by hand process and the guiding lines, cuts the desired apertures in the paper. From here it goes into the hands of an inspector who, with the use of the score, and the sheet, in connection with the machine, endeavors to locate and detect any irregularities or mistakes in the order of the perforated notes. If there be any, the same are marked and returned to the arranger" (pp. 300, 301, R.). This is the exhibit marked "Second Step" (pp. 309, 310, R.).

THIRD STEP. The arranger then takes the sheet and "through the assistance of the same scale and graduated schedule, makes corrections marked by the inspector" (p. 300, R.). This is the exhibit marked "Third Step" (p. 310, R.).

FOURTH STEP. Again "the sheet is returned to the inspector for final testing and if correct is O. K'd." This is the exhibit marked "Fourth Step" (p. 310, R.), and the perforated sheet thus found correct is called "the original" (p. 300, R.).

FIFTH STEP. This "original," being of unsuitable paper, is used as a stencil, and by passing ink rollers over it a further pattern

is prepared which is the exhibit marked "Fifth Step" (pp. 300, 302, 310, R.), on which the perforations are stenciled.

SIXTH STEP. The stenciled perforations are then cut out and the "master" or "templet" is thus produced, a calculating device being used to bring the apertures into perfect alignment; see the exhibit marked "Sixth Step" (pp. 300, 310, R.).

This master, which is a *fac simile* of the "original" with more accurate alignment, is placed in the perforating machine, which it governs so that exact reproductions are obtained therefrom, and these reproductions are the perforated music in question (p. 302, R.). The "original" and the "master" are preserved (pp. 314, 315, R.).

Expression marks upon the staff notation, such as "Moderato," "M. P.," and "Rit," are separately copied upon the perforated music sheet by the use of rubber stamps (pp. 311, 312, R.; Ex. 5), and before the completed music sheet is attached to the spool or wooden cylinder around which it is wound, the dynamic marks on the music sheet are copied by a row of blue dots extending from one end of the perforated music sheet to the other, changes in their lateral position indicating the dynamics of the piece. These dots are stenciled upon the perforated sheet from a diagram prepared for the purpose immediately after the inspection of the "original" (pp. 312, 313, R.). The use made of the staff notation in the production of the perforated music sheet or roll was thus summarized upon the cross-examination of Mr. Clark (p. 313, R.):

"X-Q. 80. Then the score plays the following part in the pro-
"duction of the finished and marketable perforated roll, to wit:

"FIRST. It plays the part which you have already described in
"connection with the delineation of the pencil marks on the sheet
"'Exhibit First Step.'

"SECOND. Substantially at the same time with the inspection,
"the results of which are shown by the corrections indicated by
"the pencil marks on the sheet, 'Exhibit Second Step,' the score
"is again referred to; the dynamic marks contained in it are repro-
"duced or re-indicated by means of the diagram, and in some cases
"additional dynamic marks are indicated in diagram, where, in the
"judgment of your experts, the original score is deficient.

"THIRD. The score is again made use of just before the com-
"pleted perforated roll is to be attached to the wooden cylinder,
"and the expression marks of the score are reproduced upon the
"roll by a rubber stamp, stencil or other form of printing.

"Have I stated these matters correctly?

"A. Yes."

Mr. Clark's testimony was supported by that of Mr. F. W. Phillips, also one of the appellee's witnesses (pp. 326–328, 343, 344, R.), who has been employed as an arranger for the Q. R. S. Company (p. 331, R.).

The pitch of the notes of the musical composition is represented by the position of the perforations in the width of the perforated music sheet, each note on the music having a corresponding perforation (p. 328, R). The lengths of the perforations indicate "time value" (pp. 99, 100, 117, 118, R). Similarly, in the staff notation the pitch of each note is represented by its position and its time value by its form.

It is asserted by the appellee's witnesses that the lengths of slots in the perforated music sheet are not proportionate to the indicated duration of the notes on the staff notation (pp. 305, 306, 329, R.). The perforations are varied in length on account of the "mechanical exigencies" of the piano-player and in order to give certain effects when the musical composition is played (p. 330, R). For example, "a quarter note slurred to the following note or notes "is given a different length from an ordinary quarter at the option of "the arranger. In another case, a quarter indicated as a staccato "note would be half the length of a quarter naturally written in the "music, but still of the same valuation, taking the number of beats "in the measure into consideration" (Test. Clark, pp. 306, 307, R.). So the arranger may gradually elongate the notes to accomplish a "ritard" (pp. 316, 317, R.). Again, the length is sometimes altered in order properly to "obtain repetition of the notes" (Test. Phillips, p. 332, R.), or a note may be "cut off" "simply to get the effect of the finishing of a phrase" (p. 334, R.).

But the arranger in determining the length of the perforations endeavors to follow as nearly as possible "the intention of the composer" (p. 334, R.; see also p. 59, R.), and in simple cases the reproduction is exact (p. 396, R.). The "Exhibit First Step" (p. 310, R.), at its right hand edge is divided by transverse pencil marks at substantially equal distances corresponding to certain bars of the exhibit score or staff notation (Test. Clark, p. 313, R.). This is the usual practice in the preparation of the sheets from the music score or staff notation, and is for the purpose of guarding "against the accidental omission of a measure or measures "of the original composition, as set out in the original score" "and" is also necessary as a guide in referring back to the score" (p. 313, R.).

The appellee's witness, John H. Hughes, testified that he had compared the perforated music "Little Cotton Dolly" with the staff notation and had found that in certain cases notes of the same value in the staff notation were represented by perforations of different lengths (p. 376, R.), and also that where the melody and the accompaniment contained at a given point notes of the same pitch, but not of the same duration, the arranger had made certain changes sacrificing features of the melody for the sake of the accompaniment, but at the same time doubling the melody through an octave above (pp. 377, 378, R.). He also testified that the first four measures had been omitted from the introduction. In a few measures the accompaniment was doubled and the roll repeats the entire piece so as to correspond with the two verses of the song (pp. 378, 379, R.).

These changes, however, are trivial and do not substantially affect the order of the notes or the identity of the compo sition. Mr. Oscar F. Gunz testified for the appellant that he had compared the perforated roll with the staff notation and had found that they agreed (p. 107, R.). For this purpose he made a templet which extended across the perforated music sheet, showing the musical value of each perforation, and also used a T-square "provided on its edge with marks corresponding to the centres or longitudinal axes of the perforations." He then "moved the perforated sheet under the templet or T-square and noted the musical value of the perforations and compared it with the musical value of the note indicators of the staff notation and ascertained the normal length of the slots for the different time values, and compared the time values of the notes with such normal lengths for the different notes of different time values." In the beginning of this comparison he compared "note for note of the perforated sheet with the staff notation," and then later on, after he had become better acquainted with both the staff notation of this particular piece and the perforated sheet, he "compared vertical lines or rows of notes in the staff notation with the transverse group of slots or perforations in the perforated sheet," and then compared "measure by measure the staff notation with the perforated sheet" (pp. 124, 125, R.).

It is not open to dispute that the "master" roll of "Little Cotton Dolly" was made from the staff notation, the perforations corresponding with substantial accuracy, to the order of the notes of that composition (p. 315, R.). The same is true of "Kentucky Babe."

III. Prior to the Copyright Act, staff notation was not the only form in which musical compositions had been published.

The Revised Statutes provide as follows :

" SEC. 4952. The author * * * or proprietor of any * * * " musical composition * * * shall, upon complying with the " provisions of this chapter, have the sole liberty of printing, re- " printing, publishing, completing, copying, executing, finishing, " and vending the same."

The breadth of this language shows that it was intended to cover every tangible form in which the musical composition had been or could be embodied or sold. It is obviously not limited to the forms in use at the time the Act was passed, but the fact that many forms had already been used and were being from time to time devised is pertinent.

Several of the appellee's witnesses define musical notation with exclusive reference to what is called " staff " notation (pp. 321, 322, 357, 358, 391, R.). But " staff " notation was not the only system of musical notation. Professor Gow mentions a number of such systems (pp. 39, 40, R.), and Mr. Gunz, who, as an expert, has devoted many years to this and cognate subjects (pp. 81, 82, R.), gives their history.

In the seventh century there was developed the " neumatic " system of notation comprising peculiar symbols known as " neumes " (p. 84, R.), photographic copies of the plates of which are among the appellant's exhibits (pp. 84, 109, 275-277, R.; see also pp. 39, 40, 171, R.).

In this notation there were no bars or measures, and " the neumes did not have any fixed dimensions either up or down or lengthwise or any fixed position " (p. 85, R.). " In the neume notation time was not expressed, and not until the fourteenth century was there any notation with different shapes of notes indicating time " (p. 85, R.).

But the " neume notation " was a notation in fact, and can be, and has been, translated into modern staff notation, and it is " by means of it only, the musical thoughts of the composers and singers of olden times have been transmitted to us " (p. 85, R.).

The neumes formed a basis for the " Gregorian " notation, from which was derived the " Whitehead " notation, and from the latter

the "staff" notation, which is a comparatively modern invention, was developed (p. 85, R.).

There is also a modern system known as the "tonic sol fa" notation, which differs radically from staff notation in that, among other things, its notes are indicated by syllables or words (p. 86, R., Ex., p. 171, R.).

Musical notation for the blind (represented by an exhibit) is produced in raised characters, the alphabet consisting of dots and blank spaces "arranged somewhat in the manner of the Morse alphabet" but on two or three superimposed lines (p. 88, R.).

Any person acquainted with these various systems can translate from any one notation into the others (p. 88, R.).

The staff notation is not absolutely perfect and "is incapable of recording all musical compositions accurately in all details;" time values cannot be indicated with absolute accuracy. These defects are sought to be supplied by marks indicating the desired expression or blending (pp. 93, 94, R.).

In recent years several new systems of musical notation have been invented and patented.

In the Acee system (patent 1871) notes of conventional shape are divided into groups of different lengths and each of the seven notes of the scale is individualized by a distinctive color. Staff lines are omitted (pp. 86, 107, R., Ex. pp. 187, 188, R.).

The Fallon invention (patent 1886) dispenses with the lines and all the marks peculiar to staff notation. The keys are marked by means of letters, each octave having a peculiar kind of type (pp. 86, 107, R., Ex., pp. 210-214, R.).

In that of Peterson (patent 1900) the notation is made up entirely of numerals for indicating the method of playing and the usual staff lines, bars and other marks of the ordinary staff notation are omitted (pp. 87, 108, R., Ex., pp. 228, 229, R.).

Black invented a system in which each character corresponds to a key on the piano (patent 1880; pp. 87, 107, R., Ex., pp. 189-191, R. See also patents of Clements-Kropp (1890), Robertson (1892), Guilford (1898), pp. 87, 108, R., Ex., pp. 207-209, 247-250); and the Dodd patent mentioned by Mr. Surette (p. 79, R., Ex., pp. 184-186, R.).

To avoid the labor of recording the musical composition in ordinary staff notation there have also been invented various recording instruments by which the composition is recorded automatically as the composer performs it (p. 89, R.). See U. S. patents of Metzger

(1874), Fernow (1880), dePilchau (1893), Cantalo (1895), and Rissman (1903), and German Patents of Kurka (1881), Boehm and Juliusberger (1886), Schneider (1896), (pp. 89–92, R., Ex., pp. 226, 218, 237, 196, 244, 259, 255, 267, R.).

Mr. Gunz has tested an automatic recording machine built by Robert Pain, of New York City. " It recorded every note played, just as played, in proper order and proper position " (p. 93, R.).

The product " of all such automatic recording machines is a musical record or notation capable of being read and of being transcribed, transposed or translated into ordinary staff notation " (p. 93, R.).

The sheets thus produced " are valuable *as records or notations only* and outside of their value as such they have absolutely no value at all " (p. 93, R.).

It is not necessary " that these recording machines should pro- " duce a record in staff notation in order that it may be intelligible or " in order to convey the desired information, as long as the record " correctly and reliably records the musical expressions of the player, " while playing on a piano connected with the recording machine, or " while operating the recording machine independently of the key- " board instrument played ; " " each musical note, mark or symbol " has its pre-determined position on the record as regards its musical " value, and can have this position only and no other position " (p. 93, R.).

A number of inventors " have stated distinctly " that the records " can be used directly for playing or singing " (p. 93, R.) *e. g.*, in the Metzger patent it is stated that the characters or notes produced " taking the place of the ordinary notes in music " are " *easily learned* " (p. 90, R., Ex., p. 226, R.). In the Boehm and Juliusberger patent the specification states that not only are composers able " to obtain a true record of the composition, but piano teachers can correct the compositions which their pupils play for exercise " without requiring the presence of the teacher during the playing (p. 92, R., Ex., p. 255, R.).

The " record made by the recording machines is absolutely true " and is not dependent " upon the skill or memory of a human being as in the case of a record in staff notation " (pp. 92, 93, R.). It " is superior to any other for accuracy and fullness of information " (p. 99, R.).

These automatic records may be made by a tracing pencil or pen, or, as stated in the Fernow patent, in place of recording pens,

vibrating perforating points may be used which perforate the paper, thus making the record in the form of perforations (p. 96, R., Ex., p. 218, R.). In some cases a perforated music sheet has been made in which the perforations, "instead of consisting of circular holes or slots were made in the shape of letters which corresponded to the tones" and the "sequence of the notes on the keyboard" (Test. Gunz, p. 105, R.; see also test. Young, pp. 148, 149, R., Ex. Young Roll. No. 1), and where the musical composition is recorded in punctures and slots the perforated sheets are as much a notation of the composition as if it were recorded by a tracing pencil, and "may be translatad or transcribed into any other notation, as, for example, staff notation" (pp. 96, 99, R.). Improvisations recorded by means of automatic devices have been so transcribed into staff notation (Test. Bartlett, p. 132, R.; test. Swift, p. 141, R.; Ex. Bartlett's Improvisation in the form of Sheet Music; see also test. Matty, pp. 153–155, R.).

Notation "is not dependent upon any bars, and this is true even of staff notation. A person familiar with this perforated music sheet notation knows that four quarters and not five are a measure" (p. 100, R.). "Musical judgment" must "supplement every kind of notation" (Test. Gow, p. 46, R.; see also test. Gunz, p. 116 R.).

There is an abundance of testimony from witnesses of the highest qualifications that the perforated music is a form of notation of musical compositions in line with pre-existing notations, from which the conclusion is that it was within the intent of the Act.

Henry T. Finck, musical critic of the Evening Post (p. 65, R.): "A great many different notations are possible and have been "in actual use at different times and are in use at the present day; "and different records, for that matter, are likewise in use, ordinary "sheet music being one form and these perforated roll records being "another form, and I can readily conceive that other forms of "records might be devised."

George C. Gow, professor of music at Vassar College: "Q. 19. "In your opinion, are they as intelligible as some of the forms of "notation or forms of record which preceded it in bygone centuries? "A. Absolutely. In other words, one could reproduce in any other "notation the notation of one of these rolls so as to adequately "present the music" (p. 40, R.).

Walter R. Spalding, assistant professor of music at Harvard University: "All musical notation depends on certain arbitrary "conventional symbols. I consider that with slight practice I could

" understand and follow the thoughts of a composer from the per-
" forations in a music roll with more ease than I can decipher cer-
" tain musical notations which have actually been used in the his-
" torical development of music " (p. 73, R).

The following witnesses testified that the perforated music is "a form of notation" or "a system of notation" of musical compositions: Walter Damrosch, Conductor of the Symphony Society (p. 74, R.); Horatio Parker, Professor of Music at Yale University (p. 77, R.); Thomas W. Surette, Lecturer on Music (p. 79, R.); John K. Paine, Professor of Music at Harvard University (p. 71, R.); Leonard B. McWhood, Instructor of Music at Columbia University (p. 50, R.); Reginald DeKoven, the distinguished composer (p. 58, R.).

IV. *The perforated music form of notation is availed of for the purpose of perpetuating, recording, copying, publishing, circulating, and selling musical compositions in a manner analogous to the prior forms of notation.*

The copyright statute, like the patent statute, proceeds upon the principle of making a bargain with the author or inventor whereby, in consideration of the monopoly, he is induced to embody his conception in a tangible form and make a public record of it in Washington instead of keeping it secret; to the end that it will be available to the public upon the expiration of the monopoly.

It makes no difference to this principle what the tangible form of this embodiment is and the statute does not limit the author in this regard. The gist of the principle is that some form of permanent notation shall be filed at Washington so as to prevent the musical composition becoming a lost art. In view of the existence of mechanical players, this function is fulfilled by the perforated notation just as well as by any other notation, because it would be impossible for a musical composition to become lost to mankind after it had been filed in Washington in the form of perforated music. And this would be true even if no mechanical player existed because of the ability to translate it into other notations by the aid of a simple gauge or even without any mechanical assistance at all where the composition is not complex. By means of the perforated music sheet it may also be played upon a musical instrument and a person skilled in the art of writing music in staff notation could write it out in staff notation while it was being performed. If all

the copies of a musical composition in staff notation were lost or destroyed and nothing remained but a perforated music sheet of the same, the perforated sheet would preserve the composition (p. 98, R.).

As soon as the composer has performed his part of the contract by filing his musical composition in any form of notation, and paying the legal fee, the Government is in duty bound under this contract to protect the monopoly against piracy of the musical composition, no matter what may be the form of notation in which it appears, and in expressing the monopoly (Sec. 4952) as "the sole "liberty of printing, reprinting, publishing, completing, copying, "executing, finishing and vending" the musical composition, Congress certainly did not exclude from the operation of the monopoly any form of notation in which the musical composition might be published.

The proof is abundant and uncontradicted that the perforated notation is used by the public in line with staff notation for recording, copying, perpetuating, publishing, buying, selling, circulating libraries, and even for filing with the Librarian of Congress.

The Aeolian Company has published over 15,000 perforated music sheets representing about 10,000 different musical compositions. They are all catalogued and sold as music or music rolls (pp. 147, 148, R. ; Exs. Aeolian Catalogue).

The infringing roll was so catalogued by the appellee (pp. 33, 34, R. ; Ex. 11, p. 287, R.).

The appellee's witness Hedgeland, in his testimony, called the perforated music sheets "controllers," but the catalogue of the Kimball Company, of which he is superintendent, is entitled "Cata-"logue of Music for the Kimball Piano Player" (p. 296, R.), and that company in its advertising styles the perforated music sheets as "music," "music folios" and "compositions" (p. 297, R.). So the catalogues of perforated music sheets for the piano players known as the "Angelus," "Chase & Baker," "Playano," "Pianola," etc., invariably describe them as "music" (p. 76, R. ; see also pp. 297, 315, R.). There is one concern, The Perforated Music Roll Company, that is engaged in the making of perforated music sheets or rolls "for the trade generally" and does not manufacture self-players or any musical instruments (p. 62, R.), and the making, selling and loaning of these perforated music sheets forms an important and distinct branch of business (p. 101, R.).

"Circulating libraries" are maintained in various cities, from

which perforated music is loaned to subscribers in same manner as books. These are for the purpose of enabling patrons "to have free access to all the entire catalogue of music rolls for operation upon their instrument and the sum of from twenty to thirty dollars annually gives the purchaser the privilege of taking twelve rolls every two weeks, returning them for new rolls (pp. 61, 62, R.). In the New York Circulating Library of the Aeolian Company "there are nearly 175,000 rolls." Similar "libraries" are also maintained in England, France and Germany (p. 148, R.).

V. *Perforated music often constitutes the primary and sometimes the only available record of musical compositions.*

This was the case with the improvisations in evidence made by Friedberger and recorded automatically by perforating machine (p. 135, R., Ex. Friedberger Improvisations Nos. 1 and 2; see also pp. 140, 141, 391, 392, R.). These compositions exist in no other form. For years past musicians have made such improvisations (p. 149, R.; p. 41, R.), and in the future, owing to the accuracy and convenience of recording devices and the popularity of instrumental piano players, there will be increasing numbers of compositions identified solely by, and sold only in the form of, perforated music sheet records (pp. 93, 94, 101, 102, 135, 136, R.). Later on (*post*, p. 22) we will return to this point.

There are also certain musical compositions embodied in perforated music notation which are unplayable by hand, either by one or two persons; some parts of such compositions "require five and six staves for properly expressing them in staff notation, and, of course, it is evident that no human being could read such a score while attempting to play it" (pp. 102, 103, 132, 133 R., Ex. Bartlett Manuscript Score). Such music "has a beauty and fullness of tone of its own; in fact, a new character," "and will probably be much used, as it permits of producing magnificent tonal effects which could not be produced by manual playing" (p. 102, R.).

In the office of the Register of Copyrights are found the records of copyrights of musical compositions, the filed copies of which were perforated music sheets. The owners of such copyrights license others to publish such compositions in staff notation transcribed from the perforated music sheets (p. 107, R.).

The improvisation of Homer N. Bartlett recorded by means of an automatic recording machine in a perforated music sheet, has thus been copyrighted (p. 131, R.; Ex., p. 168, R.). The same is

true of Mr. Friedberger's improvisation, of which there is no record save the perforated music sheet (p. 135, R.; Ex., p. 170, R.).

While crude instruments using perforated sheets were known for many years, on account of their crudity they were used only in a small way prior to 1890 (p. 62, R.). There is hardly any comparison between the piano players of the present day and those of fifteen years ago. "In the former days the instruments would merely produce sound and it was almost impossible or practically so to obtain musical expression. During the past few years ingenious devices have appeared to enable the operator or performer upon the instrument to obtain artistic musical expression of the highest order" (p. 63, R.). The result is that, as stated by the Kimball Company, "a new era of music" has been introduced pp. 297, 298, R.). As it is now possible faithfully to record in perforated notes and artistically to produce the best musical compositions, there has been a large and increasing demand for piano-players, and the dealings in perforated music have attained enormous proportions. The Aeolian Company has sold between "five and ten million different rolls of music." "The lowest average of performance of each roll" has been twenty, and at this rate the performances by means of perforated music have been estimated at no less than "one hundred million compositions per year" (p. 148, R.).

Concerts and recitals have been given both here and in Europe at which artists of the highest rank, such as Madame Nordica, Edouard de Reszke and Burgstaller, performed or sung to the accompaniment played on these instruments by means of the perforated music (pp. 148, 100, R.).

Such perforated music is used for "organs, orchestrians, piano-players and in connection with string instruments" (p. 100, R.). They embrace all classes of music, "sacred, popular, dance, classical, operatic" (p. 61, R.). By a recent invention the interpretations of great musicians may be indicated by a line drawn upon the perforated music sheet and by the invention of the "Metrostyle" the performer is enabled to reproduce the interpretation (pp. 103, 148, 149, R.). The results of these improvements is the popularization of good music. The drudgery of years of practice, too frequently unattended by commensurate results, is dispensed with and "music is being bought and reproduced in many homes where before there was little, if any, music because of a lack, not of musical taste, but of the technical skill essential to good manual

performance (Test., Finck, p. 65, R.; Test., Damrosch, p. 74, R.). Perforated music is used in schools and colleges as convenient aid to musical instruction (pp. 49, 71, 73, R.). Further, it enlarges the scope of musical composition, enabling the composer "to give full vent to his musical ideas without being obliged to consider the limitations of the human fingers." Thus is made possible "the use of the pianoforte for music heretofore impossible"; and the importance of this to musical art "cannot be over-estimated" (p. 151, R.).

Argument on the Facts Continued. Reply to Appellee's Position.

When the argument of appellee upon the facts is boiled down it will be found to hinge upon the allegation that the perforated music is read by the instrument while the staff notation is read by the person. In other words, it is stated by the Circuit Court of Appeals as follows (p. 490, R.): "It is not a copy in fact; it is not "designed to be read or actually used in reading music as the "original staff notation is; and the claim that it may be read "* * * even if true, would establish merely a theory or possi- "bility of use as distinguished from an actual use. The argument "that because the roll is a notation or record of the music it is, there- "fore, a copy, would apply to the disc of the phonograph or the bar- "rel of the organ, which, it must be admitted, are not copies of the "sheet music. The perforations in the rolls are not a varied form of "symbols substituted for the symbols used by the author. They "are mere adjuncts of a valve mechanism in a machine. In fact "the machine or music-playing device is the thing which appro- "priates the author's property and publishes it by producing the "musical sounds, thus conveying the author's composition to the "public."

We are not concerned in this case with such things as phonograph discs. Perforated music is a copy of staff notation in many ways in which phonograph discs are not; the order of the notes and every rest, time indication, retard and accelerando being physically and faithfully "copied."

The fact is that where the composition is simple the perforated music may be read without any mechanical assistance, but when it is complex some mechanical assistance is necessary, such as a gauge, templet, parallel ruling or a mechanical player.

We make four replies to the above position of the appellee and the Circuit Court of Appeals :

1. In the first place as matter of law it makes no difference whether the form in which the musical composition is embodied or recorded can be read directly by the person or whether he has to invoke aid to read it. Once it is admitted, as it is admitted in this case, that in making the infringing rolls the music itself (*i. e.*, the order of the notes, as distinguished from the mere form of notation thereof), is in fact copied from the copyrighted sheets, it becomes entirely immaterial how or by what the rolls can be read. The act prescribes no such limitation to the monopoly as that it applies only to such forms of the musical notation as can be read by the person without aid. This portion of our reply will, however, be presented more fully under the discussion of the law (*post*, pp. 50 to 56).

2. In the second place, the statement is incorrect that the reading of the perforated music is "merely a theory or possibility of "use as distinguished from an actual use" (*post*, p. 22 *et seq.*).

3. In the third place it is not the fact that the perforated rolls when used in an Apollo or other player are "*mere* adjuncts of a valve mechanism in a machine." On the contrary that statement puts the cart before the horse and to be absolutely correct should say that the machine is the mere adjunct of the person in reading the perforated sheet (*post*, p. 25 *et seq.*).

4. In the fourth place it has always been customary, and nearly always necessary, for persons to have the aid of some mechanical device or musical instrument to aid in reading staff notation (*post*, p. 29).

We do not understand even appellee to contend that the perforated music is not actually read. As we understand appellee's position it is merely that in reading it the reader frequently requires the assistance of some mechanical means. It is in fact actually read for two purposes :

(*a*) It is read for the purpose of transcription into staff notation. In this case the mechanical aid is merely a gauge or a longitudinal ruling of the paper between the rows of perforated notes.

(*b*) It is also read for the purpose of playing the music. In this case the person still does all the reading for expression, but is relieved, by a machine like the Apollo, of picking out the notes.

The Actual Reading of Perforated Music for the Purpose of Transcription Into Staff Notation.

This is not "merely a theory or possibility" as assumed by the Circuit Court of Appeals. It is an actual use and not only so but a use which has already assumed large proportions and will undoubtedly develop enormously in the future.

It is in evidence that automatic perforating machines exist which when attached to a piano will record a musical composition in perforated notes as fast as it is played. Such automatic perforators are used by those composers who compose by improvising. They have merely to improvise on the piano and, when they are through, the perforating machine hands them out a complete record of the composition which is in fact more accurate and faithful than any record that could be made in any other form of notation (R., p. 93). Composer Friedberger says (R., p. 135): "With the aid of this recording machine, the "musical ideas or improvisation preserves every quality and every "characteristic in a way which no other method could possibly "substitute for."

Having thus made a primary record of the improvisation in perforated notes form, this is read with the aid of a gauge for transcription into staff notation form (R., pp. 98, 100). Among the exhibits in this case the Court will find an illustration of this use for publication. "Bartlett Improvisation, Complainant's Exhibit" is the primary record, by an automatic perforator, of an improvisation which was afterward read and transcribed into the staff notation "Complainant's Exhibit, Bartlett's Improvisation in the Form of Sheet Music" (R., p. 132). It is sold in both forms.

Other examples of the work of these automatic perforating machines are Exhibit Friedberger Improvisation No. 1 and No. 2 (R., p. 135). These improvisations have been copyrighted by filing them with the Librarian of Congress in the perforated roll form produced by the automatic perforator (R., pp. 168, 170).

The perforations are systematically arranged to represent the musical composition. They can be transcribed into "staff" notation as readily as certain other systems of notation which have been used in the past (pp. 40, 99, 100, R.). It is necessary, of course, in any case of transcription from one notation to another, for the transcriber to be familiar with the system of notation (p. 43, R.). In

the case of simple music it is not a difficult task to read or transcribe the perforations (Test. Gunz, p. 99, R.; test. Gow, p. 41, 42, R.). One may place lines and clefs upon an ordinary perforated music sheet and by placing a light behind it read from it and play the composition upon the piano, using the perforated music sheet like ordinary staff notation (Test. Young, p. 149, R.; Ex. Young Roll, No. 2). So the perforated music sheet may be read or deciphered with the aid of a rule or templet (pp. 96, 99, 105, R.). The fact that Mr. McWhood was unable while upon the witness stand to produce in staff notation with complete accuracy the perforated music of the "Mocking Bird" with variations (pp. 53–56, 306–310, R.) does not prove the contrary. The witness did not have a rule or templet and the composition was complex. The witness Matty without the aid of any musical instrument or staff notation made a templet of the perforated music sheet of "Little Cotton Dolly," showing the notes of the composition (Test. Matty, pp. 153, 154, R.; Ex., p. 279, R.); and with the aid of this templet the music can be written in staff notation (p. 154, R.). If it be said that the playing of a piece of music recorded on a perforated music sheet will make a subsequent reading of it easier, this does not determine the question, "because the same is true of even staff notation" (p. 99, R.).

In any case, with the aid of the "rule or guide" or "graduated schedule" used in producing the perforated music sheet from the staff notation, the composition can be copied from the perforated music sheet into staff notation. This is virtually admitted by the appellee's witnesses (pp. 306, 311, 332, 397, R.), and is necessarily so, as otherwise there would not be such an orderly arrangement of the perforations as would permit of the performance of the composition—the variations in the length of perforations, of which the appellee's witnesses make so much, not being sufficient to alter, but being intended to preserve, the character of the composition and to give it proper musical effect. The templet or "rule" or "graduated scale" used in such translation serves merely as a key to the notation.

It is a poor rule that does not work both ways and it certainly works both ways in this case. By the aid of a simple scale or templet, the perforated notation may be transcribed into the staff notation just as well as *vice versa*, and the extent to which this transcription has been done *vice versa* is enormous. Practically every classic composition of every great composer of every country,

and every popular song composed up to the present day has appeared upon the market both as perforated music and also as staff notation music. All of this has been transcribed from one form to the other by the aid of a scale or templet and the custom has become so universal that it is a mere matter of routine whether the transcription be made in one direction or the other not affecting in the least, the function or brains of the author or "the progress of science and the useful arts" contemplated by the policy of the common law, by the Constitution, or by the statute.

We submit that the absurdity of regarding readability without mechanical assistance as a test of infringement is demonstrated by the two following illustrations:

1. Appellee does not deny that the order of the notes can be read on any perforated roll, no matter how difficult its musical composition, by ruling it with parallel lines distinguishing the rows of notes, as shown for example in Exhibit Young Roll No. 2 and the testimony as to it (R., p. 149), or as shown in the patents to Fernow (R., p. 217) or Boehm (R., p. 256) or Schneider (R., p. 269). If, therefore, there was any force in the position that readability without assistance is the test of infringement it would follow that, of two perforated rolls having the same musical composition, the one with parallel ruling would infringe, while the one without the parallel ruling would not.

2. Or let us state the same idea differently. In staff notation the staff is a parallel ruling to aid the eye in distinguishing the order of the notes as indicated by their relative position and if this staff ruling were omitted from an ordinary music sheet it would be difficult or impossible to read the composition without something like a gauge or templet to take its place. Then appellee's position would be that of two music sheets bearing the same composition the one with the staff ruling would infringe, but the one without would not.

It should also be remembered that in many notations that have been in regular use the staff lines have been omitted. Thus the notations illustrated at pages 187, 210, 221, 171, 275, 276, of the record and described at pages 86, 87, 39, 40, 84, all omit the staff lines.

A literary composition may be written either on ruled or unruled paper and either with or without punctuation to aid the reader. Yet no one will contend that because the ruling of the paper or the punctuation is omitted it ceases to be the same composition or would cease to infringe a copyright thereon.

The Person Actually Reads the Perforated Music, Even When Assisted by a Mechanical Player in Picking Out the Notes.

If the proper reading of perforated music consisted merely in enunciating or sounding the notes in the order in which they are perforated without regard to expression, the statement of the Circuit Court of Appeals as to not being read by the person might be correct; but on the contrary in the use of the Apollo the reading of the perforated sheet involves expression (with respect to which it is read by the person) as well as mere enunciation (with respect to which the machine comes to his assistance).

For the purpose of enabling the person to read the perforated sheet for expression it is placed in the appellee's instrument, the Apollo, in such position (see illustration, *post*, p. 71) that the perforations are directly under his eye as they pass from the roll to the tracker board and the instrument is provided with levers whereby the person, as his eye tells him is necessary, is enabled to control the speed, loudness or softness as each series of perforations comes into operation.

It is an entire mistake to suppose that the Apollo supersedes the person in reading or rendering the music. The person is still there with his eye on the music as when playing the piano directly, and by the hand levers he controls the loud pedal of the piano as of old and the soft playing, and he also controls the tempo. The only duty that he is relieved from by the instrument is the duty of fingering the keys which is attended to by the fingers of the Apollo. So far is the person from being relieved of the reading of the music that the evidence is uncontradicted that if the perforated sheet were hidden from him so that he could not read it there would be no possibility of properly rendering the music.

The uncontradicted testimony of Mr. Young on this point is as follows (p. 149, R.):

"Q. 21. To what extent are you guided by the perforations in "the music rolls when you are playing the pianola or a similar "instrument? A. It is well known that familiarity with an instru- "ment like the pianola enables a person to recognize certain fea- "tures as they unfold themselves to one on the roll. For instance, "it is exceedingly easy to recognize a chord, a run or a trill; I can "also tell on any roll of music whether a run be chromatic or an "ordinary scale or an arpeggio at a glance; I can also recognize a

" trill or a chord. It is also possible in most instances to recog-
" nize the melody note, whether in the bass or in the treble. As-
" suming that the person who plays the piano with the pianola is
" more or less musical and familiar with the operation of the levers,
" it is possible for him to accent these melody notes to some extent
" and to give due prominence to such melody notes. I, in nearly
" every instance when playing the piano with the pianola, recognize
" a chord when it is introduced at the end of a run for a climax ;
" thus I immediately prepare to accent such a chord, and recognize
" from its appearance and position its relation to the run spoken
" of, and realize in order to properly bring out the effect which was
" obviously intended by the composer, it is necessary to accent this
" chord the same as I would do if I were playing the passage on the
" piano by hand, and were reading the composition from the printed
" sheet music. It is very easy to see when a passage either in
" octaves, chords or single notes is ascending or descending. I can
" tell at a glance whether a passage has been indicated in the printed
" sheet by the composer to be played legato, non-legato or staccato
" from its appearance in the music roll, assuming that the per-
" forated sheet is a faithful transcription of the indications made by
" the composer in the printed sheet. I can in nearly every instance
" tell from the appearance of the perforations what kind of phrase
" marks were used by the composer in the sheet music, as the per-
" forations are so cut and arranged as to bring out the phrasing as
" indicated by the composer. It is a comparatively simple matter
" to tell where the measure divisions occur. I think I can draw a
" line across the perforated music sheet to indicate where each
" measure ends and where the next begins—as a matter of fact, this
" is constantly done on the music sheets which are cut for the pur-
" pose of accompanying singers or instrumental artists. I have
" here a roll which has been marked in this way, and in order to do
" this work it is only necessary to compare the sheet music with the
" notes cut in music roll. In many cases I can tell when syncopa-
" tion occurs, and from the appearance of the perforations will know
" which note is to be brought out in order to have the proper effect
" of the syncopation. I can tell at a glance how to perform certain
" passages as to their time durations by their appearance on the
" roll. For instance, if a chord is to be played which on the sheet
" music should have the duration of a dotted eighth followed by a
" sixteenth, and next in turn followed by another chord, I know at
" once what the composer desires as much as if I were playing by

" hand, and in such a case I would hold the first chord a little " longer than its indicated length, and play the second chord a " little faster. This figure occurs a great many times in classical " music, and I believe I can detect it every time on the perforated " music. I have two rolls here upon which no indications have " been made as to time, accent, or in any way to guide one as to the " proper performance but I believe I can indicate most of the " melody notes to show where syncopation occurs, and to illustrate, " if you desire it, nearly all the points and features which I have " suggested and described in the foregoing. These two pieces are " classics and I have never seen the sheet music of either of them " and have never played either by hand, and have only heard one of " them so played, and that but once several years ago.

" All of the above points are necessary to a proper rendition of " the compositions, and, of course, I can detect them, regardless of " the name of the notes or the key. If a covering were placed over " the unwinding roll, and I were not able to see the music sheet, it " would not be possible for me to recognize any of the above feat- " ures, and the effect musically would be as unpleasant as if I struck " wrong notes."

Professor Gow, the musical professor of Vassar College, testified (p. 45, R.) :

" x-Q. 55. In the use of the perforated rolls with the automatic " players for which they are designed, what guidance, if any, or " instruction, does the performer obtain for the purpose of render- " ing the reproduction of the music by the instrument more perfect " or more strictly in accordance with the composer's thought by " what he sees of the perforated roll as it comes into sight during " the action of the machine, apart from any words or symbols which " may be imprinted upon it; that is, what such instruction or guid- " ance does he get from the perforations themselves, which consti- " tute, as I understand you, according to your view, a system of " notation expressive of the musical composition ? A. The skillful " player gets a very great deal of assistance from the perforations " which present the pitch and the length of the sound in the " Æolian. I cannot say in regard to the Apollo or other instru- " ments using perforated rolls, since I have not operated them, but " in the Æolian a good player reads the perforations just as he " would read the notes upon a staff, and knows, therefore, how to " make those insensible changes which produce the finer grades of " interpretation with which every musician is compelled to sup-

" plement the printed record. Thus, the very form of a melody " will suggest slight gradations of rapidity and accentuation " that are not put down by what are called expression marks " either upon staff notation or upon the Æolian roll. It " would be far less possible to make an artistic rendering of a com- " position if the player could not first see the notation by the per- " forations.

" x-Q. 56. So far as I understand you, then, instruction which " the sight of the perforated roll gives the performer is one which " appeals, not to his knowledge of any system of notation, but to " his sense of fitness in respect to the musical composition; that " is, his musical judgment determines the expression and rapidity " as he apprehends the trend of the composition from the pitch and " relative lengths of the note or other features which together give " to the particular part of the composition under consideration its " character and color? Is that correct? A. Musical judgment has " to supplement every kind of notation. The notation, however, is " necessary as a basis of judgment. You can't hail a trolley car " after it has gone by.

" x-Q. 57. In the absence of any expression mark or tempo " mark on the perforated sheet, as I understand you, the musician " of good judgment would anticipate the proper expression and " speed from what he might see in advance of the point of actual " production on the perforated sheet; is that your meaning? A. " Just the same as he would do with a piece of music printed upon " a staff notation, without marks of expression or tempo marks, and " there are many such."

If any member of this Court has attempted to operate one of these perforated music instruments he knows that for the proper rendering of the music his eye has to be constantly on it, and that the difference between a poor rendering and a good rendering is the difference between the ability of the poor player and the good player to read the significance of the perforations as they approach the tracker board and to apply the proper speed or emphasis to correctly expound the intention of the composer.

With respect to all reading for expression the person reads the perforations precisely the same as he does the notes in staff notation for the same purpose.

Nor are the perforations the only part of the perforated sheet that is read by the person. It also contains many guides of expression that are put there for the express purpose of being read by the person. If the Court should unroll the infringing Little Cotton

Dolly roll it will find such expressions as "Medium Loud, Moderato, Medium Fast," "Soft," "Ritard," "Very Soft," "Tempo," "Cres." "Dim." These are all so that the person reading shall know how to operate the appropriate levers to produce the proper variations at the proper points in loudness or speed for the intended expression. The Court will also notice a crooked line in blue dots extending the full length of the sheet which is to indicate to the reader the requisite loudness at all stages.

Similar expression marks or abreviations thereof will be found on the staff notation. Thus, if the Court will turn to the staff notation of Little Cotton Dolly it will find the abbreviations "m. f." (meaning mezzo-forte or medium loud), "p" (meaning piano or soft) "p. p.", "cresc," "dim," "rit," located as the corresponding expression marks are found on the perforated infringement.

The testimony is that it has been the custom of composers to employ these marks as a part of the regular notation. Thus, Professor Paine of Harvard University testifies (p. 71 R): "The marks "of expression in a musical composition are essential and are made "by the composer, and they are a part of the composition, because "the tempo, or time, and the dynamic effects of loud and soft, "crescendo and diminuendo, are an indispensable means of en- "hancing the effect of the musical sounds. * * * Beethoven "set the example of the nicest precision in this respect."

The present law of Germany, passed in 1901, distinguishes in terms between *purely* mechanical playing devices, such as discs or cylinders, and devices, like perforated music, where the person controls the playing "with respect to dynamic power and duration of tone and with respect to tempo in a manner similar to personal performance" (R., pp. 448, 451).

It Has Always Been Customary, if Not Necessary, for the Person to Have Mechanical Aid in Reading Staff Notation.

The use of an instrument as an aid to the person in reading a musical notation is not peculiar to perforated music. Indeed, the musician is very rare who can sing direct from staff notation. The regular procedure is to call in a piano to aid in reading and to pick the music out on the piano as it is read.

Thousands of persons who enjoy music and who are able to perform instrumentally cannot read staff notation consecutively

without the aid of an instrument. While many can read a simple melody there are numerous compositions, especially those of Chopin, Tausig, Liszt, and their successors, which require much fingering and studying before they can be read and played; and very few are able to read an orchestral score (pp. 94, 79, R.). Even highly skilled musicians frequently take a pencil and mark the extreme high or low notes by their proper names or letters so as to have a guide (R., p. 96). Various devices have been used and inventions have been made to facilitate the reading of music and manipulation of the instrument in accordance therewith (pp. 104–106, R.; Wood's Patent, p. 253, R.). As a mechanical aid to blind presons a notation analogous to the Morse alphabet is published in raised characters without staff lines or any of the characters of staff notation. The blind person passes his fingers over the raised characters and then performs from memory (R., p. 88).

Appellee's position sustained by the Circuit Court of Appeals therefore resolves itself down to saying merely that in reading the perforated roll notation the aid of an instrument is more necessary than it is with staff notation.

Summary of Attributes Copied.

The mechanical function of a perforated roll is not an attribute of the *musical composition* it contains, because the roll would perform the mechanical function if its perforations were not in the order of the notes of any musical combination (R., p. 148).

Confining our attention, therefore, to the attributes of the musical composition *per se*, we find that they were all copied from the previously established attributes of staff notation. Before perforated music was introduced the customs in trade, in use, and in construction of musical compositions were well established, and it is surprising how closely the perforated music has followed these footsteps.

1. A person owning a piano and an Apollo has his choice to use either the staff form or perforated form, and finds practically all the thousands of musical compositions available to him in both forms.

2. He finds both forms widely on sale, the same musical compositions being manifolded in each form indefinitely.

3. He finds circulating libraries of each form.

4. He finds printed conspicuously on both forms the name of the musical composition, which indeed is designated in the certificate of copyright as "the title or description" of the copyright.

And he finds that, in perforated the same as in staff form, everybody uses this name in speaking and dealing.

5. He finds that in both forms this name is used in catalogues as the sole "title or description," as it is used in the copyright certificate.

6. He finds that both forms are catalogued, sold and spoken of as "music."

7. He finds that the sole ultimate object of both forms is the production of the same musical composition and that the value and sales of both forms are determined by the value of the musical composition whose name they bear.

8. He finds that the place provided to receive one form on the Apollo, like the place to receive the other form on the piano, is so located as to put each form directly before him, so that the music is in position to be read by his eye as the playing proceeds.

9. He finds that his eye does, in fact, read both forms for expression and that the Apollo, like the piano, is provided with loud and soft controllers to enable him to make this reading effective.

10. He finds also that on the paper of both forms are printed the same expression marks such as "Rit," "Cres," "Mf," "F," &c., at corresponding points.

11. He finds that both forms are permanent records, capable of being read for transcription, and therefore equally an assurance against the knowledge of the musical composition being lost or kept secret. And he finds that with some compositions the original record is made in the perforated form and then transcribed into the staff form, while with others this order is reversed.

12. Coming to examine the manner in which the musical combination is constructed in each form, he finds that in both it consists of the same order of the notes.

13. He also finds that in both forms the pitch of each note is shown by its position and its time by its form.

14. Both are constructed on paper, so as to be light, clean, cheap and convenient for handling, mailing, etc.

Having found that the two forms of notation have all these attributes in common, how can it be held that one is not a copy of the other simply because the perforated roll has the *additional* attribute of a mechanical function which, indeed, is not in fact an attribute of the musical composition it contains *per se*, but would exist no matter what the order of its perforations!

PART II.

ARGUMENT ON THE LAW.

Appellant Holds a Valid Copyright.

The statute was duly complied with by the deposit of title and copies, and in all other respects (R. p. 5, 6, 12 to 14, 21, 22, 30, 57, 155, 156).

It was argued below that the appellant did not have a good title to Little Cotton Dolly, it being claimed that the agreement of June 18th, 1897 (p. 159, R.), constituted only a license. But this contention was plainly devoid of merit, and Judge HAZEL so held (pp. 472, 473, R.).

The copyright on Little Cotton Dolly was obtained by the appellant as proprietor on May 15th, 1897 (pp. 160, 162, R.), and this was done with the consent of the composers (pp. 38, 57, R.; see, also, p. 13, R.). It was competent for the composers to make a parol transfer of the musical composition and to authorize the appellant as proprietor to take out the copyright (*Callaghan vs. Meyers*, 128 U. S., 658; see, also, *Mifflin vs. White*, 190 U. S., 263), and the undisputed evidence clearly shows that this was done. The formal instrument of June 18th, 1897, was intended to be an instrument of confirmation. It was intended that the appellant should become, and it did become, the owner of the musical composition and it took full title to the copyright.

In the Kentucky Babe case the copyright was taken out after the formal agreement was made (pp. 281 to 285 and 18 R.), so that no question of title arises as to it.

Appellant's Interpretation is in Accord with the Policy of the Law and Appellee's Interpretation is Not.

It is undeniable that the policy of the law is to protect the author against every form of piracy without distinction. It is also undeniable that the piracy of a musical composition by reproducing and selling it in the form of perforated music is just as culpable as in any other form. It is no less a piracy to sell a musical composi-

tion if it be in a form readable by the aid of an instrument than if it be in a form readable by a person without such aid.

The Constitution purports to secure to authors "the exclusive right to their respective writings," and it is obviously not compatible with this to protect them only against the sale of their writings in a form which requires no assistance of mechanism for reading.

The Statute purports to give authors of musical compositions the sole liberty of publishing and vending the same, and it is manifestly not compatible with this to permit it to be published or vended without the author's permission in any form, no matter what means are required for reading it.

We do not believe that any reasonable person will deny that appellant's position in these cases is in full accord with the policy of the law. Indeed, the Circuit Court of Appeals said (p. 489, R.):

"We are of the opinion that the rights sought to be protected "by these suits belong to the same class as those covered by the "specific provisions of the copyright statutes, and that the reasons "which led to the passage of said statutes apply with great force to "the protection of rights of copyright against such an appropria-"tion of the fruits of an author's conception as results from the "acts of defendant."

Since the interpretation which we ask is therefore undeniably the only one which will carry out its policy, the statute should certainly be so interpreted, unless such interpretation is inconsistent with its terms or with the terms of the Constitution. The incompatibility of appellee's interpretation with the policy of the law creates substantially a *prima facie* case in favor of appellant's interpretation, which should therefore prevail, unless the language found in the Constitution or statute excludes the perforated form of notation from their scope.

Let us now see whether any such language is to be found either in the Constitution or Statute in the light of the decisions.

The Constitution, as Interpreted by the Decisions, is Broad Enough to Include Perforated Music.

Article 1, Sec. 8, of the Constitution provides that Congress has the power: "To promote the progress of science and useful arts "by securing for limited times to authors and inventors the exclu-"sive right to their respective writings and discoveries."

The argument of our opponents is that perforated music is excluded, or at any rate is not included, by the word "writings."

In the copyright law itself, Congress has construed the word "writings" far from literally, by including under it (Sec. 4952) "any "book, map, chart, dramatic or musical composition, engraving, "cut, print or photograph or negative thereof, or a painting, drawing, chromo, statue, statuary and of models or designs intended "to be perfected as works of the fine arts." In principle we ask for no broader interpretation here.

The interpretation of the word "writings" of the Constitution and the words that stand for it in the Act, has already been the subject of decisions by this Court, particularly in Lithograph Co. vs. Sarony, 111 U. S., 53, and Holmes vs. Hurst, 174 U. S., 86.

Lithograph Co. vs. Sarony, 111 U. S., 53 was upon a copyright for a photograph and the argument was that a photograph was not within the word "writings" of the Constitution, but this Court held the contrary saying (p. 58): "By writings in that clause is meant the "literary productions of those authors, and Congress very properly "has declared these to include all forms of writing, printing, engraving, etching, &c., by which the ideas in the mind of the author "are given visible expression. The only reason why photographs "were not included in the extended list in the Act of 1802 is probably that they did not exist, as photography as an art was then "unknown, and the scientific principle on which it rests, and the 'chemicals and machinery by which it is operated, have all been "discovered long since that statute was enacted."

Holmes vs. Hurst, 174 U. S., 86, held as follows: "The right "thus secured by the copyright Act is not a right to the use of "certain words, because they are the common property of the "human race, and are as little susceptible of private appropriation "as air or sunlight; nor is it the right to ideas alone, since in the "absence of means of communicating them they are of value to no "one but the author. But the right is to that arrangement of "words which the author has selected to express his ideas. Or, as "Lord MANSFIELD describes it, "'an incorporeal right to print a "'set of intellectual ideas or modes of thinking, communicated in "'a set of words or sentences, and modes of expression. It is "'equally detached from the manuscript, or any other physical "'existence whatsoever' (4 Burrows, 2396). The nature of this "property is perhaps best defined by Mr. Justice ERLE in Jeffreys "v. Boosey, 4 H. L. C., 815, 867: 'The subject of property is the "'order of words in the author's composition; not the words them-

" ' selves, they being analogous to the elements of matter, which " ' are not appropriated unless combined, nor the ideas expressed " ' by those words, they existing in the mind alone, which is not " ' capable of appropriation.' "

* * * * * * *

"It is the intellectual production of the author which the copy- " right protects and not the particular form which such production " ultimately takes, and the word 'book' as used in the statute is " not to be understood in its technical sense of a bound volume, " but any species of publication which the author selects to em- " body his literary product."

Bleistein vs. Donaldson Co., 188 U. S., 239, held that chromo-lithographs were included within the word "writings." *American Mutoscope Co. vs. Edison Co.*, 137 Fed., 262, held that a film for use in a moving picture machine was within the constitutional word "writings" on the ground that by it the ideas of the author were given expression.

The only distinction upon which the attempt is made by our opponents to exclude perforated music from the word "writings" is because in reading perforated music, when the composition is complex, a person requires the assistance of some mechanical device which may be either a mechanical player, such as a Pianola or Apollo, or may be merely a rule, gauge or templet, or may be even the longitudinal ruling of the perforated sheet. We cannot find any basis for such a distinction in the decisions nor any reason for such a distinction in the policy or language of the constitution.

Holmes vs. Hurst, 174 U. S., 86, holds that a copyright is not for "the right to ideas alone since in the absence of means of "communicating them they are of value to no one but the author"; but it puts no limitation upon the character of the "means for communicating them" whether such means or "writings" appeal to the sense of sight, or the sense of touch, or the sense of hearing, or whether as an adjunct for either of these senses some mechanical device is necessary. If, as is true in this case, the requisite mechanical device existed in the art, the perforated music furnished to the art the "means of communicating" the ideas of the author and, therefore, fulfilled every requisite mentioned in the decision of Holmes vs. Hurst. That decision also applies to the perforated music in its statement that the subject of copyright property is "the order of "words" (notes) "in the author's composition; not the words" (notes) themselves. Certain it is that, whether notes be expressed

as in staff notation or by perforations, they are in the order " which " the author has selected to express his ideas."

The perforated music also complies with the interpretation of " writings " in Lithographic Co. vs. Sarony as being a form " by which the ideas in the " mind of the author are given visible expression." The fact that in availing one's self of this visible expression it is necessary to employ something else to aid the sense of sight is immaterial. For example, a book in raised letters for the blind would be the subject of copyright, and if another system of protuberances or depressions unlike any characters used in writing and printing and not understood by the uninstructed were used as means for conveying the author's idea to the blind, it could not be doubted that a book so prepared would be an infringement of a copyright on the book as ordinarily printed and within the constitutional provision.

The perforations are no less visible " writings " because a gauge is used to aid the eye in translating them. The word visible, we understand to be used in the Sarony case in the sence of being tangible as distinguished from being an abstraction just as this Court has distinguished the " order of the words " from the abstract idea conveyed by such order. Writings in a foreign language are no less visible to us if we have to employ a dictionary to help us translate them. A scale drawing of a house is no less visible to a carpenter because he has to employ his rule to get the measurements therefrom for building. Writings may be visible to a near-sighted person, although he cannot read them without the assistance of spectacles. The picture of an assemblage of persons is visible, although a key is necessary to recognize the individuals. The curve, so universally used for representing variations in electric or other energy or speed or statistics or natural laws, is visible, although in reading its significance the scientist constantly employs a rule to measure its distance above the base line at various points.

The statements in the foregoing opinions that a copyright cannot be taken on ideas existing in the mind alone are similar to the principles of patent law that a patent cannot be taken on an invention existing in the mind of the inventor alone. In both cases, the ideas must be reduced to some tangible or visible form so as to make them of value to others than the author or inventor. But after an inventor has reduced his ideas to one tangible form and has presented that form to the Patent Office and obtained a patent, his patent is not limited to that particular form but covers all other forms in which

his mental conception may be embodied. The same is true with copyrights and it therefore makes no difference whether the mental conception of a composer be embodied in perforated music or staff notation music. Those being two well known ways of expressing, recording and publishing the ideas of a composer, they are necessarily both within the scope of the copyright, for the same reasons that they would be both within the scope of a patent if we were dealing with an invention. This Court held in Holmes vs. Hurst that in considering copyrights it was proper to look for analogy to the patent law.

The coupling together in the Constitution of the two words "writings and discoveries" shows that the word "writings," the same as the word "discoveries," is to be understood as referring to to the intellectual production of the author and not to the particular form of script in which he may have expressed that intellectual production.

The mutuality of the contract which the Constitution evidently contemplates between the Government, on the one hand, and the author or inventor on the other, also leads to the same conclusion. In consideration of the promotion of the progress of science and useful arts which is accomplished by the making public of "writings and discoveries" instead of keeping them secret, the Constitution offers to authors and inventors for a limited time "the exclusive right to their respective writings and discoveries." The real consideration of value that the public gets under this agreement is an intellectual consideration and not merely the particular form in which that intellectual consideration is embodied. In order to preserve the mutuality of this constitutional agreement between the author and the Government, it is necessary that the exclusive right received by the author should be coextensive with the consideration that he gives and, therefore, that it should cover the intellectual conception in whatever form it may be susceptible of utilization by the public, no matter whether its utilization may be accomplished merely by the senses alone or may require the assistance of known mechanical devices.

By the adoption of the words, "securing for limited times to authors and inventors the exclusive right," the framers of the Constitution clearly expressed the intent that authors should be protected against every form of piracy because otherwise the right would be only partial instead of "exclusive." If an author has among his writings a musical composition, the only possible way of

"securing" to him the "exclusive right" thereto is by giving him the monopoly of this musical composition, no matter in what form it may be represented; otherwise, he gets only a partial exclusive right thereto, instead of the entire exclusive right as manifestly contemplated by the Constitution. No composer can be truly said to have "the exclusive right" to his musical composition writings secured to him so long as others have the right to publish, and sell them without his consent, in the form of perforated music.

The Copyright Statute is also Broad Enough to Include Perforated Music.

"*Musical composition*" is the term of the Statute under which this case comes, and our position is that perforated music is literally described by that term; just as literally as is staff notation.

In our argument of the facts (*supra*, pp. 15, 16) we have presented abundant witnesses of highest qualifications to this effect. We have also shown that it is in accordance with the policy of the law (*supra*, p. 32) and the Constitution (*supra*, p. 33).

The Circuit Court of Appeals holds (p. 489 R.): "But in view "of the fact that the law of copyright is a creature of statute and is "not declaratory of the common law and that it confers distinct "and limited rights, which did not exist at the common law, we are "constrained to hold that it must be strictly construed, and that "we are not at liberty to extend its provisions, either by resort to "equitable considerations or to a strained interpretation of the "terms of the statute."

As applicable to this case the right conferred by the statute is the "*sole liberty of printing, reprinting, publishing, completing, copy-*"*ing, executing, finishing and vending*" *the* "*musical composition.*" Where, in that language, does the Circuit Court of Appeals find any statement that the rights are "*distinct and limited*" so as to exclude a musical composition in the form of perforated music and so as to permit the piracy of the musical composition by "publishing, "completing, copying, executing, finishing and vending the same" in the perforated music form? The Circuit Court of Appeals does not quote the words it refers to as expressing such "*distinct and limited rights.*"

Again, to what words of the statute does the Court refer as requiring a "*strained interpretation*" to cover perforated music? To us it seems that the natural meaning and, indeed, the literal meaning, of all the words of the statute covers perforated music equally with staff notation, and it seems to us that the "strained interpretation" is required to *exclude* the perforated music rather than to *include* it.

We have already shown that the undeniable policy of the law is to cover all forms of piracy. We have also shown that the language of the Constitution is broad enough for that purpose in this case; or, in other words, as interpreted by the decisions of this Court, is broad enough to include the order of the notes in perforated music. In considering the Constitution we have of necessity advanced many considerations which are equally in support of our interpretation of the Statute.

The first Congress of the United States, sitting immediately after the adoption of the Constitution, enacted that the "author or authors of any map, chart, book or books," being citizens, etc, "shall have the sole right and liberty of printing, reprinting, pub-"lishing and vending the same, etc." (1 Stat., 124, 1).

On April 29th, 1802, the Act was extended to prints (2 Stat., 171). On February 3rd, 1831, a further amendment was made by inserting the words "*musical compositions*," which have ever since remained in the statute (4 Stat., 436). The first section of that Act read as follows (italics ours):

"That from and after the passage of this Act any person or "persons, being a citizen or citizens of the United States or resi-"dent therein, who shall be the author or authors of any book or "books, map, chart or *musical composition* which may be now "made or composed, and not printed and published, or shall here-"after be made or composed, or who shall invent, design, etch, "engrave, or work, or cause to be engraved, etched, or worked from "his own design any print or engraving, and the executors, admin-"istrators or legal assigns of such person or persons, shall have "the sole right and liberty of printing, reprinting, publishing or "vending such book or books, map, chart, *musical composition*, "print, cut or engraving in whole or in part for the term of twenty-"eight years from the time of recording the title thereof in the "manner hereinafter directed" (4 Stat. at Large, p. 436).

The language of the present statute (U. S. R. S., Sec. 4952, as amended by the Act of March 3d, 1891, is as follows (italics ours):

"The author, inventor, designer, or proprietor of any book, map, "chart, dramatic or *musical composition*, engraving, cut, print, or "photograph or negative thereof, or of a painting, drawing, chromo, "statue, statuary, and of models or designs intended to be perfected "as works of the fine arts, and the executors, administrators, or as- "signs of any such person shall, upon complying with the provi- "sions of this chapter, have the *sole liberty of printing, re-printing, "publishing, completing, copying, executing, finishing and vending the "same*; and, in the case of dramatic composition, of publicly per- "forming or representing it, or causing it to be performed or repre- "sented by others; and authors or their assigns shall have the exclu- "sive right to dramatize and translate any of their works for which "copyright shall have been obtained under the laws of the United "States."

The words we have italicized above do not express any limitation of the "sole liberty" to the particular form in which the musical composition happens to be at the time recorded, and it seems impossible to find anything in this language which would prevent one copyrighting a musical composition in the form of perforated music as well as staff notation music irrespective of which form happens to be actually filed with the Librarian of Congress.

By the Act of January 6th, 1897, Section 4966 of the Revised Statutes was amended so as to read as follows (italics ours):

"SEC. 4966: Any person publicly performing or representing "any dramatic or *musical composition* for which a copyright has "been obtained, without the consent of the proprietor of said "dramatic or *musical composition*, or his heirs or assigns, shall be "liable for damages therefor, such damages in all cases to be "assessed at such sum, not less that one hundred dollars for the first "and fifty dollars for every subsequent performance, as to the Court "shall appear to be just."

It is not necessary to look further than the latest copyright decision of this Court for a key to the whole question here presented. We refer to the opinion by Mr. Justice BROWN in Holmes vs. Hurst, 174 U. S., 86. The word "book," which was the subject of interpretation in that case, occurs in the same sentence of the Statute with the word "musical composition," and precisely the same rules must govern the interpretation of both. Its absolute applicability to a "musical composition" is apparent from the fol-

lowing quotation by simply substituting "notes," in brackets, for "words":

"The right thus secured by the copyright act is not a right to "the use of certain words [notes], because they are the common "property of the human race, and are as little susceptible of "private appropriation as air or sunlight; nor is it the right to "ideas alone, since in the absence of means of communicating "them they are of value to no one but the author. But the right "is to that arrangement of words [notes] which the author has "selected to express his ideas. * * * 'It is equally detached "'from the manuscript or any other physical existence whatsoever,' "4 Burrows, 2396. The nature of this property is perhaps best "defined by Mr. Justice ERLE, in Jeffreys v. Boosey, 4 H. L. C., "815, 867: 'The subject of property is the order of words [notes] "'in the author's composition; not the words [notes] themselves, "'they being analagous to the elements of matter, which are not "'appropriated unless combined, nor the ideas expressed by those "'words [notes], they existing in the mind alone, which is not "'capable of appropriation.'"

Upon the same subject the same opinion of Mr. Justice ERLE continued (p. 868) as follows: "With respect to the first of these "grounds, that copyright cannot be the subject of property, in- "asmuch as it is a mental abstraction too evanescent and fleeting to "be property, and as it is a claim to ideas which cannot be identi- "fied, nor be sued for in trover or trespass, the answer is that the "claim is not to ideas but to the order of words, and that this order "has a marked identity and a permanent endurance. * * * The "order of each man's words is as singular as his countenance, and "although if two authors composed originally with the same order "of words each would have a property therein, still the probability "of such an occurrence is less than that there should be two "countenances that could not be discriminated. The permanent "endurance of words is obvious by comparing the words of ancient "authors with other works of their day; the vigor of the words is "unabated; the other works have mostly perished. It is true that "property in the order of words is a mental abstraction, but so "also are many other kinds of property; for instance, the property "in a stream of water, which is not in any of the atoms of the "water, but only in the flow of the stream."

Again, on the subject of copying by an infringer, the same opinion of Mr. Justice ERLE continued as follows (p. 871): "Words

"are free to all; he may print any words that he can compose or "get composed, but it does not follow that he may transcribe the "composition which another has appropriated."

The concurring opinion of Mr. Justice COLERIDGE, in the same case (Jeffreys vs. Boosey, 4 House of Lords Cases, 815), near the middle of page 903, said that "there is no distinction for this pur- "pose between a literary and a musical composition expressed in "musical characters."

Our position, therefore, is that this Court has substantially decided that "the subject of property" in a copyrighted musical composition is the "order of the" notes "in the author's composition," by adopting in Holmes vs Hurst, 174 U. S., 86, Mr. Justice ERLE'S *definition of the subject of property in a book or literary composition as being "the order of the words in the author's composition."*

Now, let us write the above definitions in brackets after the words "book" and "musical composition" in the Copyright Statute, as follows:

"SEC. 4952. The author * * * or proprietor of any book "[*i. e., order of words*] * * * or musical composition [*i. e.* "*order of notes*] * * * shall, upon complying with the pro- "visions of this chapter, have the sole liberty of printing, reprint- "ing, publishing, completing, copying, executing, finishing and "vending the same."

The decision of this Court in Holmes vs. Hurst, 174 U. S., 86, not merely decides that "the subject of property is the order of words in the author's composition." It also decides that it is "not "the words themselves, they being analogous to the elements of "matter"; and, again, that it is "not a right to the use of certain "words"; and, again, that "it is equally detached from the "manuscript or any other physical existence whatsoever." The only condition imposed is that there shall be "some means of communicating" the order of the words, so that it shall not exist merely as an idea, and thus be "of value to no one but the author."

Under the Holmes vs. Hurst decision it certainly follows therefore that the "sole liberty" which the statute grants is infringed by any one who copies, publishes or vends the *order* of the words, no matter if in doing so the particular notation or "physical existance" of the individual words is copied or not. And the same thing must also be true as to the notes of a musical composition.

The only thing that has to be copied to constitute a copy of the copyright property is the *order* in which the notes were set down.

But the witnesses of appellee admit that in making the infringing perforated music they copy the " order of the notes." Indeed so careful are they to copy the order of the notes that they use a graduated scale in the first instance and then have an inspector go over the lay out to see that no departure has been made from the order of the notes (*supra*, p. 8).

In applying the word " note " to the perforation we are adopting the parlance employed by appellee in the direct examination of its witnesses. Thus, their, witness Hopkins testified (p. 395, R.) :

" Q. 10. In speaking of the ' note ' of the perforated roll you " refer to the slot which represents the note of the written score ? " A. I mean the hole or perforation made."

And for the purpose of exactly copying in the perforated music the order of the notes on the score or staff notation they admit proceeding as follows (Clark, p. 300, R.) :—

" Having the score at hand we place upon a suitable table " convenient for the arranger, a sheet of paper fed from a " large roll, and upon this paper we place a rule or guide upon which " are marked at regular intervals the letters of the scale and their " relative octaves to guide the arranger in *placing the note or notes* " *in their proper position.* A graduated schedule is used in pro- " ducing the desired length of the note or rest and to ascertain other " marks which are indicated in the score. The reason of the scale " and the graduated schedule is to assure the arranger of the *proper* " *location and position of the notes* " (italics ours).

Phillips, page 328, R.: " Q. 14. Then, as I understand, for " each and every note occuring in the score you find a place for the " perforation in the width of the sheet by means of the graduation " marks on the scale. Is that correct ? A. Yes."

See, also, Clark, p. 313 ; Hughes, p. 370 ; Hopkins, p. 393.

If, therefore, we are correct in understanding the decision of this Court in Holmes vs. Hurst, 174 U. S., 86, to imply that copying the *order* of the notes is copying the copyrighted composition, we find the admission of appellee's witnesses that this is exactly what was done in making their rolls, and the conclusion is inevitable that they have infringed.

But, says appellee, although I have copied the order of the

notes I have not copied the notation by which they are represented in the original, but have substituted perforations, and these differ from the original notation in the fact that a person cannot always read them without the assistance of a gauge or parallel ruling or a mechanical player.

We believe that this distinction is entirely untenable in view of the Holmes vs. Hurst decision. We also can find no language in the statute justifying such a distinction. When the statute grants to the author the " sole liberty " with respect to the " musical composition " it makes no distinction as to the form in which the notes are expressed and certainly comprehends a " musical composition " in which they are put down in the same order by perforation as well as though they were put down by staff notation.

The Holmes vs. Hurst decision says that the property secured by a copyright is not " the right to ideas alone, since in the absence " of means of communicating them they are of value to no one but " the author." But this does not exclude perforated music because there is known " means of communicating," to wit, either by the assistance of a gauge or a mechanical player or even by parallel ruling, and therefore instead of being of " value to no one but the " author," they are just as valuable as is music in any other form of notation.

It is immaterial that in the year 1831, when the term " musical composition " was first placed in the copyright statute the perforated form of musical compositions was not known. In Edison vs. Lubin, 122 Fed., 240, the Circuit Court of Appeals for the 3d Circuit held: " When Congress, in recognition of the photographic " art, saw fit in 1865 to amend the act of 1831 (13 Stat., 540) and " extend copyright protection to a photograph or negative, it is not " to be presumed it thought such art could not progress, and that " no protection was to be afforded such progress. It must have " recognized there would be change and advance in making photo- " graphs, just as there has been in making books, printing chromos " and other subjects of copyright protection. While such advance " has resulted in a different type of photograph, yet it is none the " less a photograph—a picture produced by photographic process."

So we say here, while the perforated notation is a different type of notation, yet it is none the less a " musical composition," none the less a perfect record and none the less a " writing."

That where the order of the notes or words is copied, infringement of literary or musical compositions is not avoided by variations in other respects has been repeatedly decided.

Mr. Justice NELSON, of this Court, sitting at Circuit, held as follows in Jollie vs. Jacques, 1 Blatch., 625: "If the new air be substantially the same as the old, it is no doubt a piracy and the "adaptation of it, either by changing it to a dance or by transferring "it from one instrument to another, if the ear detects the same air "in the new arrangement will not relieve it from the penalty; and the "addition of variations makes no difference. The original air re-"quires genius for its construction, but a mere mechanic in music, "it is said, can make the adaptation or accompaniment."

In Blume vs. Spear, 30 Fed., 631, Judge WHEELER held: "Upon "the question of infringement there is not much room for doubt. "The theme or melody of the music is substantially the same in "the copyrighted and the alleged infringing pieces. The measure of "the former is followed in the latter and is somewhat peculiar. "When played by a competent musician, they appear to be really "the same."

Judge BLATCHFORD, subsequently a member of this Court, held in Daly vs. Palmer (6 Blatch., 266): "An arrangement of musical "notes forming a tune or air, is a musical composition; and the "author who has invented it, and set it in order, and copyrighted "it, is entitled to protection." Judge BLATCHFORD then cited the above decision of Mr. Justice NELSON and as to the views therein stated continued (p. 268): "They are eminently sound and just and "are applicable to the case of a dramatic composition designed for "public "representation."

A stenographic copy of the order of words was held to be an infringement of an ordinary literary composition notwithstanding the difference in notation (Nicols vs. Pitman, L. R., 26 Ch. Div., 374).

A positive celluloid film for a moving picture machine was held to be a photograph by the Circuit Court of Appeals of the Third Circuit in Edison vs. Lubin, 122 Fed., 240.

A photogravure was held to infringe an engraving or an etching by Judge TOWNSEND in Fishel vs. Leuckel, 53 Fed., 499.

A chair back was held to infringe a picture in Falk vs. Howell, 37 Fed., 202.

A chromo was held to infringe a painting in Falk vs. Donaldson, 57 Fed., 32, by Judge TOWNSEND, although there was no competition between the two and although many of the characteristics of the original were lacking.

Stereoscopic slides where held to infringe a painting in Turner vs. Robinson, 10 Ir. Ch., 121, 510, although photographed not from the painting but from objects and scenery arranged from a recollection of the painting.

A photograph was held to infringe an engraving or print in Gambart vs. Hall, 14 C. B. N. S., 306, even if photographing were unknown when the statute was passed.

Drone on Copyright, p. 385: The author "may claim it as his "own, in whatever language or form of words it can be identified "as his production. The true test of piracy then is not whether "a composition is copied in the same language or the exact "words of the original, but whether in substance it is reproduced; "not whether the whole but whether a material part is taken. In "this view of the subject it is no defense of piracy that the work "entitled to protection has not been copied literally; that it has "been translated into another language; that it has been dram-"atized; that the whole has not been taken; that it has been "abridged; that it is reproduced in a new and more useful form. "The controlling question always is whether the substance of the "work is taken without authority."

Scrutton on Copyright, Ed. 1903, p. 135, note: "Thus, repro-"duction by lithography, *Novello v. Sudlow* (1852), 12 C. B., 177; "or in shorthand, *Nichols v. Pitman* (1884), 26 Ch. D., 374; man-"uscript or typewritten copies, *Warne v. Seebohm* (1888), 39 Ch. "D., 73, will be infringements. *Semble*, also, that a copy or copies "imprinted on a phonograph or printed in the blind raised alpha-"bet would be a 'multiplication.'"

The publications for the blind in "*New York Point*" are produced on machines adapted to the purpose, so that the only embodiment of the author's intellectual production consists of the arrangement of raised points. These have been freely copyrighted and there can be no reasonable question of the propriety of the grant of copyright in such cases. Still there is no other record save that mechanically produced and in a form not at all adapted, or intended, to be read visually, but solely for the purpose of conveying the intellectual work to the intelligence of the blind through the sense of touch.

So, also, music for the blind is produced in raised characters like the Morse alphabet, but on superimposed lines (R., p. 88).

A strong side light is thrown upon the meaning of "musical composition" in Section 4952 by its manifest meaning in Section 4966 wherein it is the subject of protection against public performance. Not only is the subject of the right described by the same term "musical composition," but the right to prevent or to recover for the unauthorized public performance depends upon its being one "for which a copyright has been obtained."

The prohibition of the public performance of a copyrighted "musical composition" is the prohibition of the public reproduction of that order or succession of notes which constitutes the composition. It is the *musical composition* that is publicly performed, and not a sheet of music.

Public performance is prohibited, whether or not any notation or record be used. And it cannot be questioned that a performance in public of a musical composition upon an Aeolian organ or Pianola, by means of perforated music, would be as much a public performance of a musical composition as if it had been played in public from a printed sheet of music in staff notation, and as such would be equally within the condemnation of the statute, provided the musical composition had been copyrighted. One who, like the appellee, sells the musical composition is a contributory infringer with the infringer under section 4952 who plays it in public.

The copyright certificate issued by the Librarian of Congress under the law purports to cover the musical composition broadly without any limitation to the form in which it is filed. Indeed the protection begins with the filing of the title before any form of any kind is filed. From reading the official certificate of the copyright (R., p. 162), for Little Cotton Dolly, one could not say whether the specimens filed were in the form of staff notation or perforated music. Indeed it appears that the specimens filed are sometimes the perforated music (R., p. 107).

The form of the copyright is as follows (R., p. 162) :—"Be it "remembered :

"That on the seventeenth day of May, 1897, White-Smith "Music Pub. Co. of Boston, Mass., has deposited in this Office, the "title of a musical composition, the title and description of which "is in the following words, to wit :

"Little Cotton Dolly (Plantation Lullaby), words by Richard "Henry Buck. Music by Adam Geibel. White-Smith Music Pub.

" Co., Boston, the right whereof it claims as proprietor in conform-
" ity with the laws of the United States respecting copyrights.

" A. R. SPOFFORD,
" Librarian of Congress."

It will be observed that the " title and description " given above are just as true of the defendant's rolls, which bear the same title, as of the staff notation and that no one could tell by reading the certificate that it was supposed to refer to one any more than the other.

It is apparent that the object of requiring a deposit of specimen copies, in order to secure copyright, is simply to identify one form of the subject of the copyright, just as in former times the law required the deposit of a model to identify one form of an invention or intellectual conception. That is to say, one embodiment of the order of notes must be suitably identified by public record. That the purpose is to require identification only, is obvious in the case of a " painting, drawing, statue, statuary, or a model or design," where it is merely necessary to deposit the "*description*" and a "photograph" (U. S. R. S., Sec. 4956). The *subject* of the copyright is not to be deposited. And while in other cases "*copies*" are required, the purpose is sufficiently indicated by this context. In the case of a musical composition it is clearly necessary to distinguish between the identifying copy filed and the composition itself, as it is of the latter " for which a copyright has been obtained " and of which public performance is prohibited. The identifying record, in whatever manner or by whatever symbols effected (it need not be printed), constitutes the " copy " for purposes of filing, but the subject of the copyright is not this copy but the musical composition or order of notes so identified, just as the thing patented is the invention or intellectual conception as distinguished from the model or drawing deposited to identify it.

At common law, while " a thing must be capable of identification in order to be the subject of exclusive ownership," yet " when its " identity can be ascertained so that individual ownership may be " asserted, it matters not whether it be corporeal or incorporeal " (Drone on Copyright, p. 6). The right of property is not limited to the form of expression which serves to identify the intellectual creation. The oral lecture of a professor to his class, under such limitations as to preclude its being considered an indiscriminate communication, is his property, although the language is spoken

and not written (*Caird vs. Sime*, L. R. 12 App. Cas., 326; Scrutton on Copyright, 4th Ed. (1903), p. 62). And while a musical composition, existing as a mere mental concept, would not be property, it would be a subject of common law exclusive right while unpublished, if identified by any sort of symbol or record. Such exclusive right would not be limited to the particular form of expression selected for the purpose of identification, but would preclude the appropriation of the arrangement or order of musical tones, which constitutes the composition, by any means of expression.

As has been well said with reference to common law property, "The plot, the characters, the sentiments, the thoughts, which con-"stitute a work of fiction, form an immaterial creation which may "be communicated by a hundred different tongues—by the labial "or the sign language of the mute, the raised letters of "the blind, the comprehensive characters of stenography. The "means of communication are manifold, but the invisible, in-"tangible, incorporeal creation of the author's brain never "loses its identity" (Drone on Copyright, pp. 97, 98). So the order of the notes producing the melodies and harmonies of a musical composition constitutes an intellectual product susceptible of expression and communication by a great variety of means; it may be arranged for the voice, for the piano, for the violin, for the cornet, for the organ, for an orchestra; it may be expressed in neumes, in staff notation, in tonic sol fa, or by any of the numerous systems of notation which have been invented (*supra*, pp. 12 to 16); it may be recorded by a vibrating pencil, pen or a perforating point or knife or cutter; it may be symbolized by notes and staves or by the systematically arranged punctures and slots of a perforated music sheet. But however arranged or symbolized, the musical creation characterized by the order of the notes never loses its identity and the composer's exclusive right of property at common law is not limited to any particular record which he may have chosen to identify and preserve it in the files at Washington.

While the common law right of property in intellectual productions is not to be confused with statutory copyright, there is every reason why the protection of the latter should apply to the same *subject*, if the language of the statute permit. The statute might have confined the copyright to a given sheet of music, "with its bars, notes and other printed words and signs," prohibiting simply the multiplication of copies of such "sheet," as in the case of the English statute (prior to the amendment of 1902), as construed by

the English Court *(post*, p. 62), but it does extend the right to the "musical composition" considered as an order of notes identified in one form by the deposited sheet, and prohibits the multiplication of copies, not merely of this sheet, but of the composition or order of notes itself.

Those Musical Compositions Primarily Recorded in Perforated Notes and Also Those Unplayable Except from Perforated Notes.

If appellee's interpretation of the statute prevails, what is the law of the records of musical compositions referred to in the above heading? Does it leave them entirely outside of the law and if not, how, according to appellee's theory, do they come under it? According to appellant's position, they are within the letter of the Statute, being most certainly no less "musical compositions" because primarily recorded in perforated notes. It cannot be doubted by any one that they are within the intent of the common law and Constitution.

We have set forth the evidence *(supra*, pp. 18–20), showing that there are musical compositions with respect to which manual playing or staff notation may never come into consideration, viz.:

1. Those improvised musical compositions that are recorded in perforated notes by the automatic perforating attachment of the piano by which the evidence is that the record of the musical composition is more faithful to the original than is possible by any other notation (R., p. 135, 103, 131).

2. Those compositions that are unplayable except with perforated notes because either requiring more hands than a person has or greater rapidity of movement than is possible by the human hands (R., p. 102, 151).

Take, for example, the musical composition of composer Bartlett, the perforated note record of which made by the automatic recorder is marked "Bartlett Improvisation Complainant's Exhibit" (R., p. 132), or that of composer Friedberger marked "Exhibit Friedberger Improvisation No. 1" (R., p. 135). Is it impossible under the statute to copyright these and if not impossible, how is it to be done excepting by sending this perforated note record to the Librarian of Congress as the copy or record of the musical composition required by the statute? This was actually done in the case of these two musical compositions and accepted by the Librarian

of Congress and each perforated roll "entered as a musical composition" (R., pp. 169, 170). Surely, the Librarian of Congress was proceeding within the law in so accepting and entering this perforated music. To hold otherwise would be to hold that Bartlett and Friedberger, after making these faithful records of their musical compositions in the perforating machine, should have, for the purposes of the copyright, translated the same order of notes into the less faithful staff notation and printed that for the sole purpose of filing copies with the Librarian. This is absurd and might be impossible because the improvisor of the musical composition might be a person who played solely by ear and was not sufficiently educated in staff notation to be able to write it. It would be impossible to write in staff notation many things in an improvisation that are perfectly written in perforated music (*supra*, p. 18).

If, after the perforated note records of Bartlett and Friedberger's improvisations have been filed and entered as "musical compositions" suppose another person should copy the order of the notes in staff notation and should publish and sell such staff notation. Can it be doubted for an instant that this would constitute an infringement of the copyright? But, if so, the reverse must also be true, because it is a poor rule that does not work both ways. In other words, if a copyright represented in the files by a perforated note record would be infringed by the same musical composition or order of notes in staff notation form, *vice versa* it must be true that a musical composition represented in the files by staff notation would be infringed by the same order of notes or musical composition copied in perforated notes, as has been done in the appellee's music in this case.

To hold otherwise would be to hold that to properly protect a musical composition the composer would have to obtain a separate copyright on every form of notation and that two persons might each obtain a copyright on the same musical composition simply because one produced it in perforated form and the other in staff notation form.

Readability by the Person Without Mechanical Assistance is not Made a Test of Copyrightability or of Infringement by the Statute.

Appellee's position is not that the perforated music is not readable. Appellee admits that it is readable, but says that in the reading of it a person requires mechanical assistance such as a gauge, or

longitudinal ruling to segregate the lines of notes, or a mechanical player.

Appellant's position on the law is that, so long as it can be read or reproduced in any way, it makes no difference what assistance the person calls in from means known in the art.

The statute contains no language directly or indirectly limiting the readability to any means. Holmes vs. Hurst, 174 U. S., 86, implies that there must not be an "absence of means of communicating" so as to be "of value to no one but the author," but does not imply that these means may not include a known mechanical assistant. To the policy of the law it is entirely immaterial whether a mechanical assistant is required or not because the only object the law has in view is to prevent the musical composition being kept secret by the author.

The Lord's Prayer and also the Ten Commandments have been copied in such small letters that a person requires the aid of a microscope to read them. Would that fact prevent such copy from infringing them if copyrighted? If not, then the necessity of mechanical aid is immaterial to the question of infringement, and there is no reason why such necessity in reading a musical composition makes any difference. The function of the microscope is analogous to the function of the gauge or longitudinal lines in that they aid the eye in locating the letters and notes respectively; the lines of notes being so close together that the eye is not acute enough to distinguish between the different lines without such assistance in complicated music.

The curves used by electricians and other scientists and by statisticians to express their ideas, for reading by others require the assistance of a scale to measure the distance of various points above the base line, but this would not prevent a copy from infringing the original any more than would the use of a rule to assist in reading the scale drawing of a machine or a house.

We have already shown (*supra*, p. 25 *et. seq.*) that the mechanical device does not supersede the person as the reader of the music; that the perforated music is put in such position in the Apollo as to be constantly under the person's eye for the very purpose of his reading; that so far as expression is concerned he in fact does read the notes and the expression marks in precisely the same way that he reads them in staff notation; and that the mechanical device acts merely as an adjunct to his reading.

In our argument on the facts (*supra*, p. 24) we have also

pointed out that appellee's non-readability point as a test of infringement would lead to two absurd conclusions: (1) That, of two perforated rolls having the same musical composition, one with parallel ruling to facilitate reading the order of the notes (*e. g.*, Exhibit Young Roll No. 2, p. 256, R; or patents to Fernon, p. 217; Boehm, p. 256; Schneider, p. 269) would infringe but one without such parallel ruling would not; and (2) that, of two ordinary music sheets having the same musical composition one with the parallel staff lines would infringe but one without such lines would not; although without the lines both the perforated roll and the ordinary sheet could be easily read by the aid of a simple gauge or templet.

There is absolutely nothing that we can find in the language of the statute forming any foundation whatsoever for such an absurd and unjust discrimination.

Appellee's position on readability is no less absurd than it would be to say that a literary composition written on ruled paper is not the same composition if written on unruled paper or that the presence or absence of punctuation determines its identity.

Whether or not a Musical Composition, in Addition to the Musical Function Performed by the Order of its Notes, Performs also a Mechanical Function is not made a Test of Copyrightability or of Infringement by the Statute.

The Circuit Court of Appeals forgot that perforated rolls would perform the mechanical function as "mere adjuncts of a valve mechanism" without embodying any musical composition whatsoever in the order of the notes. Forgetting this, the Court therefore forgot that the mechanical function is not an attribute of the order of the notes and that this order of the notes as a musical composition is copyrightable subject matter, while the perforated roll without this order of the notes would be a mere mechanical matter.

Thus, Mr. Young testified (Rec., p. 147):

"Q. 9. These rolls have been called 'controllers' by Mr. "Hedgeland. Suppose a perforated roll was made in which "the perforations were arranged without regard to the repro- "duction of any musical composition—placed in the paper at

" random so as to produce no melody or harmony—would such a " roll operate one of these instruments ? A. It would.

" Q. 10. Would it be possible to sell such a roll ? A. It would " not.

" Q. 11. But as far as any strictly mechanical function is con- " cerned, it would operate or control the mechanism of the piano " player equally as well as a roll which was the record of a musical " composition ? A. It would.

" Q. 12. Then it is obvious that in purchasing a perforated roll " the buyer has no interest whatever in the mechanical function of " his instrument ? A. He buys the perforated roll because he " wishes to perform the musical composition of which it is the " record. Were it not for the fact that these rolls are records of " musical compositions they wouldn't be made and they couldn't be " sold. Their value commercially depends upon the popularity of " the musical composition of which they are the record."

The piracy lies not in the use of a perforated roll in its capacity of a " mere adjunct of a valve mechanism," but in the fact that it is constructed in such a way as by the order of its notes to embody not merely that mechanical function but in addition thereto our copyrighted musical composition.

A theft is never excused by the fact that the stolen property is applied or added to something belonging to the thief.

The fact that you own a fabric does not excuse you for printing thereon a design patented to me. So the right to use a perforated roll mechanically does not excuse you for placing thereon and using the order of notes which constitutes my copyrighted musical composition.

If these were the printing rolls of a printing machine, the fact that the type thereon performed a mechanical function would not justify setting the type in such order of words as to embody and print my copyrighted literary composition.

Every one must so enjoy his own rights as not to infringe the rights of others. The legal maxim is: " *Sic utere tuo ut alienum non laedas.*" If the Apollo Co. wishes perforated rolls to operate its machines, let it make them with orders of notes that are public property or let it compose new orders of notes for its own use, but do not let it embody in them the order of notes that we have composed and copyrighted.

If it were true that this new order of perforated notes was the " *mere* adjunct of a valve mechanism in a machine," then the

originator, Geibel, should be entitled to a combination machine patent; and every time a new and useful order of perforations was devised the originator therefor should be entitled to a separate combination machine patent. Of course such a thing would be impossible and the suggestion of it is the *reductio ad absurdum* of the theory upon which the Circuit Court of Appeals decided this case. The reason it would be impossible is because the new order of notes is not a new mechanical combination but is a new "musical composition," and, therefore, its protection comes under the copyright law and not the patent law.

The Circuit Court of Appeals is therefore entirely beside the mark in holding that the perforations are "mere adjuncts of a valve "mechanism in a machine." That might be true if we were dealing with perforations *per se*, but we are not. The appellant is not seeking to prevent the use of perforations to make a mechanical player work, nor even to prevent the appellee from the use of perforated notes in the order of a musical composition free to the appellee. It is only when appellee copies the order of its perforated notes from a musical composition belonging to us that we complain.

In other words, in holding that the perforations *per se* are not "symbols substituted for the symbols used by the author," but are "mere adjuncts of a valve mechanism," the lower Court entirely loses sight of the very distinction so clearly expressed by this Court in Holmes vs. Hurst, 174 U. S., 86, between the words *per se*, which are "as little susceptible of private appropriation as air or light" and the "*order* of words in the author's composition."

It is impossible to say that the *order* of the perforated notes is the "mere adjunct of a valve mechanism," because the valve mechanism would work with the perforations in whatever order. It is not the machine that puts or requires the perforations in this order, but the appellee.

The Circuit Court of Appeals (R., p. 490) takes the position that, "In fact, the machine or music playing device is the thing which "appropriates the author's property and publishes it by producing "the musical sounds, thus conveying the author's composition to "the public."

There are many replies to this position. In the first place, by holding that the "music playing device is the thing which appro- "priates the author's property and publishes it," the Circuit Court of Appeals holds that piracy actually exists, but that all persons escape by laying it to the machine. This is like permitting the

murderer to escape by laying it to the gun by which the fatal bullet was fired. Moreover, it entirely loses sight of the fact that there is such a thing as contributory infringement. Indeed, by holding that the machine infringes, the Circuit Court of Appeals, in substance, convicts as contributory infringers not merely the appellee, but every one who contributed towards the result that the machine "appropriates the author's property and publishes it."

Resume of Replies to the Positions of Our Adversaries on the Law.

The first position of our adversaries on the law appears to be that the word "writings" of the Constitution is not broad enough to cover a musical composition in which the order of the notes is set down as in perforated music.

We have fully replied to this position in our discussion of the Constitution (*supra*, p. 33 *et seq.*).

The second position of our adversaries on the law appears to be, in substance, that in view of the physical differences between staff notation and perforated music, the latter cannot be considered a copy of the former without treating the "musical composition" of the statute as an abstraction or a mere idea and therefore not copyrightable.

This position finds a complete answer in the decision of this Court in Holmes vs. Hurst, 174 U. S., 86, saying: "The subject of "property is the order of words in the author's composition; not "the words themselves * * * nor the ideas expressed by "those words, they existing in the mind alone which is not cap- "able of appropriation." "It is equally detached from the manu- "script or any other physical existence whatsoever."

We have shown (*supra*, p. 40 *et seq.*) that the corollary of the above decision is that the gist of the copyright on a musical composition is *the order of the notes in the author's composition;* not the notes themselves, nor the abstract ideas expressed by those notes, nor the manuscript, nor any other physical existence whatsoever. And we have also shown (*supra*, pp. 8, 9) that defendant's witnesses admit having not only copied the order of the staff notation notes in putting down the perforated notes, but having employed gauges in doing so for the purpose of making their copy of the order of the notes exact.

The third position of our adversaries on the law is that the "musical composition" is limited by the statute to one expressed in a notation that is, in practice, read by the person without the assistance of any mechanical device, and that because it is customary and, in complex cases, necessary for a person reading the notes of perforated music to have the assistance of a gauge or parallel ruling or a mechanical player, therefore it is excluded by the limitations of the statute.

The replies to this position are:

1. That it has always been customary in reading all kinds of musical notation to invoke the assistance of a musical instrument and that musicians are very scarce who can dispense with such assistance, even with staff notation (*supra*, p. 29).

2. That the ultimate object of reading all kinds of musical notation is the same—namely, to produce the music—and that the mere mental reading of music without the production of sound is substantially useless, and that with respect to the ultimate and only useful object, the perforated notation and staff notation differ only in form and furnish the user with that order of the notes which has been held to be the gist of the copyrighted property (*supra*, pp. 5 and 53).

3. That the mechanical player or gauge is merely the assistant or adjunct of the person in reading the perforated music and that the person still actually reads the music with respect to all things pertaining to the expression as we have already fully discussed (*supra*, pp. 25 *et seq.* and 53).

4. Since a perforated roll longitudinally ruled between the perforated notes can be read, if readability were the test of infringement, a perforated roll with the ruling would infringe but without the ruling would not infringe—a manifest absurdity (*supra*, pp. 24 and 52).

5. That, as matter of law, it makes no difference to the language of the statute whether the reading be done directly by the person or indirectly by a machine under the control of the person.

Upon the latter point of our reply, we submit that the statute contains no such limitation and the discussion *supra*, p. 38 *et seq.*

The fourth position of our adversaries seems to be expressed in the opinion of the Circuit Court of Appeals, as follows (R., p. 490): "The perforations in the rolls are not a varied form of sym-
" bols substituted for the symbols used by the author. They are
" mere adjuncts of a valve mechanism in a machine. In fact, the
" machine or music playing device is the thing which appropriates

" the author's property and publishes it by producing the musical " sounds, thus conveying the author's composition to the public."

The numerous replies to this position are presented *supra*, pp. 25 and 53 *et seq.* It loses sight of the fact that the mechanical function is performed by the perforated sheet without regard to the *order* of the perforations; that on the other hand under the Holmes v. Hurst decision the *order* of the notes is the copyrighted musical composition belonging to us; that appellee can enjoy the right to use perforated rolls for the mere mechanical function by using those embodying uncopyrighted orders of notes but cannot extend this right so as to interfere with our property; that it is impossible to consider the machine, as does the Court, as the actual infringer without making the appellee at least a contributory infringer.

The fifth position of our adversaries seems to be that perforated music does not *compete* with staff notation. If this were true it would not aid the appellee. In *Falk vs. Donaldson* (57 Fed. Rep., pp. 36, 37), it was claimed that the photograph and the advertising lithograph were not rivals and were "*not in competition in any way*," but the Court held that this did "not affect the question of infringement, but only the question of the measure of damages." The owner of the copyright "is entitled to any lawful use of his property whereby he may get a profit out of it." Nor is the claim justified by the facts (R., p. 321). With the enormous expansion of the trade in piano players and in the sale and circulation of perforated music sheets therefor, it is inevitable that the demand for music in staff notation should be affected, and it is obvious that this competition is destined rapidly to increase.

In connection with this claim it has also been asserted, and the appellee has been at pains to introduce considerable evidence to show, that some composers and publishers have from time to time been willing to permit perforated music sheets to be made of certain of their compositions without compensation. This is plainly beside the mark and involves merely a question of individual interest. Permission to make a copy does not affect the fact that it is one, and if one composer sees fit to waive his rights, this does not alter the rights of others. That the eminent composer Victor Herbert does not waive his rights appears from the able brief submitted here in his behalf. The composer should have the power to say by whom and for what consideration, if at all, his composition shall be copied in perforated notes.

There Is No Controlling Authority Opposed to the Complainant's Contention.

We will later on consider the English decision of *Boosey vs. Whight* (L. R., 1900, 1 Ch., 122), which was based upon the narrow wording of the English statute, and in view of the amendment of that statute in 1902, can no longer be regarded as authority, even in England.

The two decisions in this country relied upon by the appellee are neither binding upon this Court nor apposite to the facts disclosed by this record.

Kennedy vs. McTammany (33 Fed. Rep., 584), was decided in 1888, and therefore long before Holmes vs. Hurst, 174 U. S., 86, by the Court of first instance, in the First Circuit. The Court treated the statute as identical with the English statute, and as if the subject of the copyright were simply a "sheet of music," citing Drone on Copyright, p. 100, where in a note reference is made to the two statutes without calling attention to the distinguishing features (*id.*, p. 101, note). And the amendment prohibiting public performances of a musical composition "for which a copyright has been obtained," plainly indicating the legislative intention as to what should be regarded as the subject of the copyright, had not then been enacted. The Court said, "The sole question in issue is "whether these perforated sheets of paper are an infringement of "*copyrighted sheet music*" (italics ours). "To the ordinary mind it is "certainly a difficult thing to consider these strips of paper as "sheet music. There is no clef, or bars, or lines, or spaces, or "other marks which are found in common printed music, but only "plain strips of paper with rows of holes or perforations." But this, as we have seen, is beside the question and would be true of many methods of notation. The only question is whether the *order of the notes* is copied, and we have the affirmative admissions of appellee's witnesses.

The Court also stated that the strips before it did not "in any "sense occupy the same field as sheet music," and "as a practical "question in the musical profession, or in the sale of printed music, "it may be said that they are not recognized as sheet music." This in view of the extraordinary improvements in recent years in instrumental players, the composing of music specially designed therefor, the use of automatic recording devices and the enormous circulation

and sale of perforated music sheets as copies of musical compositions, can no longer be maintained.

Unquestionably the Court was influenced by the crudity of the mechanism (a mere music-box known as the "organette"), to which the perforated strip was adapted, and it would have been virtually impossible for any Court sixteen years ago to have appreciated the true significance of the question or to conceive of perforated music rolls used, distributed and sold as are those of the present day.

It is important to notice that in a later case the same learned judge who decided *Kennedy vs. McTammany*, took quite a different view of the question as to what constitutes the original and what the copy within the purview of the U. S. Copyright Law. The case referred to is that of Pierce & Bushnell Mfg. Co. against Werckmeister, 72 Fed. Rep., p. 54. This was a decision by the United States Court of Appeals for the First Circuit, and the opinion of the majority of that Court was written by Judge COLT.

In the Werckmeister case the Circuit Court had held that a painting was not a "copy" in the sense of that clause of the statute which requires that the copyright notice be placed upon every copy of the copyrighted painting, and the Circuit Court held that the copyright was valid and infringed.

Upon appeal this was reversed. The Court of Appeals held that a painting which had been published was a copy within the meaning of Section 4962 of the Revised Statutes, and that by reason of the failure to place upon it the copyright notice, the copyright was invalid. The decisions of both Courts turned upon the distinction, if any, to be observed in construing the copyright statute between the embodiment of an intellectual creation in permanent form and the creation itself independent of such embodiment. Judge COLT held that the painting, meaning the canvas and color, was only one of many possible physical or commercial embodiments of the intellectual conception, and therefore should bear the copyright imprint. In the opinion Judge COLT speaks as follows:

(p. 56) "Copyright under the statute is the exclusive right to "publish a literary or artistic work. * * * In the case of a "book, map, engraving, or photograph, it is commonly published "in multiple form; in the case of a painting or statue, it may or "may not be published in multiple form. * * * If we confine "ourselves to the subjects of copyright, and eliminate from our "minds any distinction between 'copy' and 'original,' the meaning "of Section 4962 seems to be clear."

If, then, the "original" be a "copy" within the meaning of Section 4962, it is plain that a "copy" is not such because it reproduces the "original" but because it is an *embodiment* of the intellectual creation which it is the object of the statute to protect. The word "copy" is used in the same sense in Section 4956; that is, it is as embodiments of the intellectual creation that "copies" are to be deposited in order to secure a copyright. Any unauthorized embodiment of a copyrigted intellectual creation is an infringing copy under Section 4952.

The decision in *Stern vs. Rosey* (17 App. Dis. Col. 562), had reference to wax cylinders for use in a phonograph, and was an appeal from a decrée of dismissal entered upon a demurrer. The Court treats the question as a novel one and relies upon *Kennedy vs. McTammany* and *Boosey vs. Whight, supra*. There is no adequate discussion of the questions involved and certainly no answer to the propositions we have advanced.

It was suggested below that comity should lead the Court to follow these decisions. Such a suggestion would certainly be out of place in this Court, and in any event if repeated it finds a sufficient answer in the language of the Supreme Court in *Mast-Foos & Co. vs. Stover Mfg. Co.*, 177 U. S., 488.

"Comity is not a rule of law, but one of practice, convenience and "expediency. It is something more than mere courtesy, which "implies only deference to the opinion of others, since it has a "substantial value in securing uniformity of decision, and discour-"aging repeated litigation of the same question. But its "obligation is not imperative. If it were, the indiscreet "action of one court might become a precedent, increasing in "weight with each successive adjudication, until the whole "country was tied down to an unsound principle."

The Foreign Decisions.

In order to present conveniently to the Court the laws of Germany and England and the decisions thereunder touching the question here involved, we have placed in the record the following:

Excerpt from the German Statute, R., p. 434.

German decisions holding infringement, R., pp. 435 to 447.

Excerpts from the English Statutes, pp. 452-3.

English decision (Boosey vs. Wright) holding non-infringement, R., p. 465.

These show that in Germany where the statute is like ours, in that it provides "the exclusive right of the author to the multiplication of musical compositions" (R., p. 434), the decision held infringement. But in England, where the statute differed from ours, in that the copyright was not specified as a "musical composition," but as a "sheet of music," the decision in 1899 of Boosey vs. Wright (Rec., p. 468) held non-infringement. There has been no decision of the point under the present English Statute of 1902 (Rec., p. 453).

In England.

The following excerpt from the English decision in Boosey vs. Wright (Rec., p. 468) shows that the only question considered was whether the "sheet of music" had been infringed, and not whether the musical composition or order of the notes had been infringed:

"The plaintiffs are entitled to copyright in three sheets of "music. What does this mean? It means that they have the ex- "clusive right of printing or otherwise multiplying copies of those "sheets of music--*i. e.*, of the bars, notes and other printed "words and signs on those sheets. But the plaintiffs have no ex- "clusive right to the production of the sounds indicated by or on "those sheets of music; nor to the performance in private of the "music indicated by such sheets; nor to any mechanism for the "production of such sounds or music. The plaintiffs' rights are "not infringed except by an unauthorized copy of their sheets of "music. * * * The only question we have to consider is "whether the defendants have copied the plaintiffs' sheet of music. "* * * A sheet of music is treated in the Copyright Act as if "it were a book or sheet of letterpress. * * * Music appeals "to the ear, but a sheet of music appeals to the eye and the ob- "servation of BAYLEY, J., in *West vs. Francis* (5 B. & Ap., 743) "is applicable not only to engravings, but to all kinds of books, "and the Copyright Act treats a sheet of music as it treats a book. "He said, 'A copy is that which comes so near to the original as "'to give every person seeing it the idea created by the original.'"

Whatever may be thought of the correctness of this decision under the English statute, it is plain that it is not applicable to a case arising under the Act of Congress. There is no such "gap"

in our Copyright Law, as Mr. Scrutton says, "was discovered when "it was found that the owners of mechanical pianos might make "profit out of the sale of rolls, from which copyright musical com- "positions could be reproduced without paying a penny to the "authors or owners of the copyright in the music they appropriate "for their own profit." He adds, "It is a slight consolation for "this defect that it has been laid down that the Sculpture Acts "apply to toy soldiers" (Scrutton's Law of Copyright, 4th Ed., Eng., Preface, pp. VI. and VII).

In England, under the decision of *Boosey vs. Whight*, *supra*, the subjects of the *copyright* and of the *performing right* are distinct; the former applies only to the "sheet of music" as a "book" or "sheet of letter press," the latter to the musical composition itself. And it has been held that the proprietor of a musical composition may maintain an action for infringement of the performing right without having obtained registration under the section relating to copyright. *Russell vs. Smith*, 12 Ad. & E., N. S., 217.

But in the United States, as we have seen, the subject of copyright and of the performing right is the same. It is the same "musical composition" which is within the statutory protection, whether reference be had to the right of multiplication and sale of copies or to the right of public performance.

In 1902 the Copyright Law in England was amended (2 Edw. VII., C. 15; Scrutton on Copyright, 4th Ed., 1903, pp. 310, 311), so as to embody much broader terms than "sheet of music," as will be seen by reference to it (Rec., p. 453).

It is, to say the least, a serious question whether under the present English statute such a decision as that in *Boosey vs. Whight*, *supra*, could be reached.

A musical composition is not copyrighted in the United States as a "book" or part of a "book," whether the copy deposited be in book form or otherwise. Thus it will be noticed that in the Act of 1831, which originally provided for copyright of musical compositions, there was a special section as to the infringement of copyright in case of "*books*" (Section 6), while Section 7 related to prints, maps, engravings and "*musical compositions.*"

Nor is it provided that the copies of the musical composition to be deposited in order to obtain copyright shall be "printed" copies. The Act of February 3d, 1831, did not so require it (4 Stat., 436), and this remained the law until 1865. By the Acts of March 3d,

1865 (13 Stat., 540) and of February 18th, 1867 (14 Stat., 395) the deposit of printed copies was required, but this provision was eliminated by the Revising Act of July 8th, 1870 (16 Stat., 198, Sec. 90, on p. 213), thus indicating the legislative intention that copies other than printed copies might be deposited in appropriate cases.

By the present Section 4956, as amended in 1891, it is provided that in case of a "book, photograph, chromo or lithograph" the two copies "should be printed from type set within the limits of the United States or of plates made therefrom or from negatives or drawings on stone made within the limits of the United States or from transfers made therefrom." This has been held not to apply to musical compositions, though published in book form or by lithographic process. *Oliver Ditson Co. vs. Littleton* (C. C. A., 1st Circ.), 67 Fed. R., 90.

It is not then a "sheet of music" considered as a "sheet of letter press" that is copyrighted in the United States, but the musical composition itself. Therefore the English decision in Boosey vs. Whight has no application to our Statute.

In Germany.

On the other hand the fact that the German Statute, like ours, does cover the "musical composition" and is not limited to the "sheet of music," makes the German decision a very important authority in our favor.

In Germany the Copyright Law of 1870 was substantially the same as our statute (U. S. R. S., Sec. 4952) and provided: "The right to multiply a musical composition mechanically is the exclusive privilege of the author." Under this the Imperial Court held that interchangeable note sheets used in a music box called the Clariphon were infringements of copyrighted musical compositions. The Court said (Rec., p. 437):

"It may well be conceded to the Court below that 'multiplica-
"tion' can be spoken of only when a number of objects are pro-
"duced in such a visible form that by means of the same the idea
"can be communicated to others But from this concession
"it does not follow that the reproduction must be made in the
"same form in which the original stepped into existence, so that the

"multiplication of a literary work would have to be in such form "that it would compete with the author's multiplication,—either "those already in existence or those intended to be produced by "him later on. * * *

"Again, a person who makes an intellectual production acces- "sible to blind persons, who cannot read printed books, by means "of a mechanical multiplication of raised type, intelligible to the "sense of touch, surely has not produced a form which competes "with the original; but he has invaded the exclusive right of the "author to make a mechanical multiplication in any form by means "of which the intellectual production becomes intelligible to man- "kind, and in this way has infringed. Whether the raised type "consists of the same signs as the readable type, or whether the "blind use dots and lines instead of letters, does not change the "situation any. For the purpose of the case under consideration— "the idea of a mechanical multiplication—this example broadens "our ideas, as it proves that a mechanical multiplication can also "relate to raised forms which make the production accessible "to a part of the public through the intervention of a human sense "different from the eye, for which the printed letters are not in- "tended. * * * But that the notes can be read is not the de- "termining reason for placing musical compositions under the pro- "tection against piracy by means of mechanical multiplications. "For the great public for whom the sale of these mechanical multi- "plications is intended, the notes must be translated into musical "language. Some persons can make this translation for "their own personal pleasure, if the composition is written for "*one* voice or for *one* musical instrument, and such persons can read "and sing the notes or can play the instrument. But compositions "arrange for several co-operating instruments, or for a chorus, such "a singer or such a player of a musical instrument can enjoy only "if at the same time he hears others sing it and play it. And the "greater part of mankind enjoys music only in this way. * * * "Upon this principle of analogy the Court is justified in coming to "this conclusion even though this new form of permanent record "for a musical work and the new forms of mechanical multiplica- "tions thereof were unknown to the Legislature; and if for that "reason words were employed in the statute that would not in terms "include reproduction of note sheets for mechanical musical in- "struments. Judicial decisions apply existing laws to newly aris- "ing conditions of life upon the principles of analogy. * * *

" The particular manner in which printed musical compositions are " musically utilized is not dealt with by the law. * * * The " possibility of utilizing the composition in other ways than those " sanctioned by the author should be made difficult, by prohibiting " mechanical multiplications of the musical composition by means " of permanently fixed signs or marks without the author's consent, " and also the sale of copies thus produced. Therefore, it is really " immaterial, in view of the underlying principles of this law, in " what manner the notes are made audible and can be made audi- " ble.

" Whether the notes of these mechanical musical instruments " can be read easily or with difficulty, or whether they can be read " at all, is utterly immaterial, for they are translated into music " without being read. Therefore, it is also immaterial whether the " translation into music can be done without mental effort, or " whether it is wholly a mechanical labor.

" * * * But whether a notated work as we have it here can " be played on one or on many musical instruments, is immaterial " with respect to the question of piracy. If there were no more " Clariphons then the specially manufactured mantle for the same " would be a musical piece of metal but of no importance ; but as there " are thousands of this kind of instruments and new ones are man- " ufactured and sold continually, therefore, these tin mantles of the " defendant, with melodies, are not mere pieces of tin, but can be " used by any one of the thousands of Clariphons for the produc- " tion of the melodies of the plaintiff, and therefore, should be " interdicted as piratical.

" * * * The question here concerns not merely a different " mechanism, but an instrument of an entirely different nature. " Formerly, the cylinder was a part of the individual instrument ; " now the note sheet is changeable. Therefore one cannot look " upon these marketable tin mantles, capable of being used in every " Clariphon, as a part of a single mechanical musical instrument " exempt under the Berne Convention."

By a statute enacted in Germany in 1901 the sale of discs, plates, cylinders, strips and other parts of instruments which serve mechanically to reproduce musical compositions without personal control is permitted; but the law prohibits the use of parts " which reproduce the musical composition with respect to dynamic " power and duration of tone and with respect to tempo in a man- " ner similar to a personal performance " (R., p. 448). This was expressly aimed at perforated music (R., p. 451).

The Claim that the Suit is Unlawfully Maintained by the Aeolian Company is Without Merit.

For the obvious purpose of prejudicing the Court the perforated music infringers have made statements to the effect that the Aeolian Company has, by advance contracts with substantially every music publisher in the United States, secured a monopoly in the event of a favorable decision. Although these statements are wholly irrelevant, justice to the Aeolian Company requires that they be not entirely ignored since they are unfounded in the proofs or in fact. The proofs show, on the contrary, that out of forty publishers addressed by one of appellee's witnesses the Aeolian Company has contracts with only five (R., p. 411). These contracts will secure to these publishers the payment of a liberal royalty, and are in every respect fair and equitable. Others have applied to publishers for contracts (R., pp. 398–9), and it does not appear that they cannot obtain them by agreement to pay a reasonable royalty. The trouble is that they wish to continue the position of pirates and oppose every move that is made looking toward any reward to the composers. They are profiting by the wholesale piracy of copyrighted musical compositions in the form of perforated music. It is because the Aeolian Company recognizes the justice of the composer's cause and agrees to pay the royalties due under these copyrights that it is the object of these attacks and these unproved and fictitious statements.

There are thousands of musical compositions upon which there are no copy-rights, and which are therefore open and free to use without royalty.

(1) The agreement between the appellant and the Aeolian Company (R., pp. 345–7) was not champertous.

It is of the essence of champerty that the agreement should provide for the division of the money or property sought to be recovered. The Aeolian Company will take no part of the appellant's recovery, but, on the other hand, it will be bound to pay royalties to the appellant.

(2) Nor does the agreement, apart from technical champerty, offend against the law of maintenance.

The law of champerty and maintenance has no application to a case where a suit is maintained by one who has an interest in the controversy. Any interest will suffice. It may be merely in the determination of the question (3 Am. & Eng. Cyc. of Law, 1st Ed., p. 76; 2d Ed., p. 20). The Aeolian Company has a proper interest. That company is entitled to acquire from the appellant, and it will acquire, an exclusive right for the making and sale of perforated music sheets of the appellant's copyrighted compositions if this decision be in favor of appellant. Having this right, it has a lawful interest in the controversy, and has not been guilty of any officious intermeddling. Further, the Aeolian Company will acquire similar rights from persons other than the appellant (p. 344, R.), and has had extensive dealings in perforated music sheets (pp. 148, R.). Believing these perforated music sheets to be covered by the copyrighted law, it was entirely proper that an agreement should be made looking to a decision of this sharply controverted question. The object is not to foment litigation, but to quiet it and to avoid multiplicity of suits.

Gowen vs. Nowell, 1 Maine, 292, was an action brought upon a bond conditioned for reimbursement of expenses incurred in the defense of certain suits, the obligor being one of several citizens who had agreed together to resist the recovery of certain taxes; the Court held:

"But it was urged further that it is against sound policy, and "will tend to promote litigation, to support this bond. It is clearly "not against morality, and we do not perceive how sound policy "can forbid a number of persons interested in the same question, "and whose claims depend on the same general principle of law, "from agreeing to defray jointly the expense which must be in- "curred in the decision of such question in a single cause, when it "is contemplated that such decision may and probably will put the "controversy at rest. Surely such a course of proceeding ought "not to be condemned as promoting litigation when the obvious "tendency and design of it was to prevent a multiplication of "contested actions" (*id.*, pp. 296, 297).

See also *Findon vs. Parker*, 11 M. & W., 675.

(3) Moreover, the appellant's title is not based upon the agreement alleged to be invalid, but ante-dates it.

The White-Smith Music Publishing Company, which copyrighted the musical composition in 1897, is the appellant, and not the Aeolian Company.

In *Gregerson vs. Imlay*, 4 Blatchf., 503, the suit was brought to enforce the champertous agreement.

In *Keiper vs. Miller*, 68 Fed. Rep., 627, the suit was brought by the assignee, who obtained title through the invalid contract. (This case was reversed on appeal by stipulation which provided for a decree in favor of the complainant, 70 Fed. Rep., 128.)

Boone vs. Chiles (10 Pet., 177) was a bill in equity to establish the title to 700 acres of land, and, among other defenses, it was alleged that an agreement in writing had been made between Boone, the plaintiff, and one Engles, by which Engles undertook at his own expense to prosecute a suit for the 700 acres in dispute and as a consideration for his trouble was to have one-half of the land, and that the suit was prosecuted under this agreement. Although the contract was void under the law of the State where it was made, the Court held that the right of the plaintiff was not forfeited thereby, and it might be asserted against the defendants without reference to the validity of his contract with Engles.

This decision was approved and followed in *Barnes vs. Scott*, 117 U. S., 582 (pp. 589, 590).

See, also, *Hilton vs. Woods*, L. R., 4 Eq. Cas., 432; *Peck vs. Heurich*, 167 U. S., 624, on p. 632.

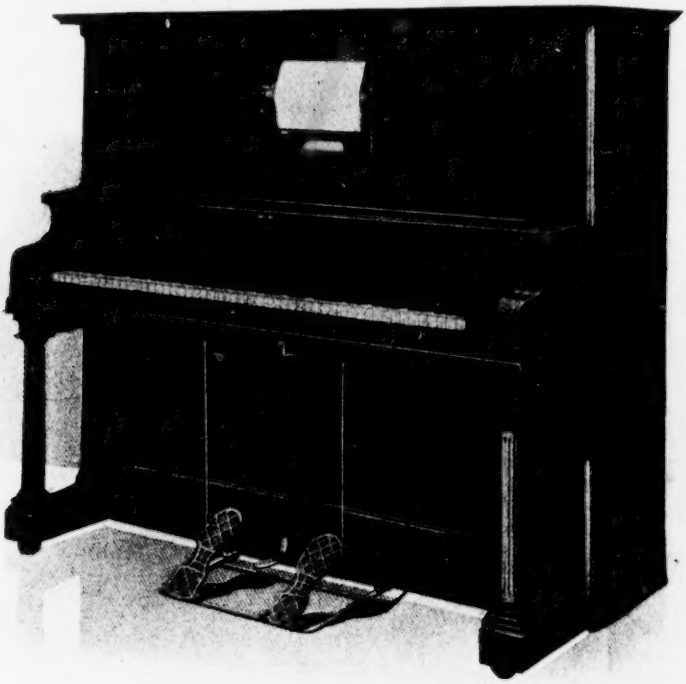
The consequence of a decision in favor of the appellant will be to prevent the unauthorized making and sale of perforated music form of musical compositions during the copyrighted period. Those who make and sell such perforated music will be bound, as plainly in justice they should be bound, to obtain the consent of the composers or proprietors of the musical compositions upon payment of proper compensation. The Aeolian Company, like others, will be compelled to pay royalties. In anticipation of such a decision other perforated music sheet companies besides the Aeolian Company have sought contracts with publishers (pp. 398, 399, R.), and out of some forty publishers addressed by one of the appellant's witnesses it appears that the Aeolian Company has contracts with only five (p. 411, R.). Neither these contracts, nor that with the appellant, have any significance whatever so far as the questions in this suit are concerned.

Conclusion.

It is respectfully submitted that the decrees should be reversed and decrees for injunctions and accountings be ordered in accordance with the prayers of the bills.

New York, December, 1907.

LIVINGSTON GIFFORD,
Of Counsel for Appellant.



MELVILLE CLARK APOLLO PLAYER PIANO

The Apollo Master Piano Player

IN THE

SUPREME COURT OF THE UNITED STATE

October Term, A. D. 1907.

WHITE-SMITH MUSIC PUBLISHING COMPANY,

vs.

APOLLO COMPANY.

No. 110.

WHITE-SMITH MUSIC PUBLISHING COMPANY,

vs.

APOLLO COMPANY

No. 111.

Petition of the Connorized Music Company for permission to file a brief, and also to make an oral argument, on the side of the Appellee.

ALBERT H. WALKER,
COUNSEL FOR
CONNORIZED MUSIC COMPANY.

IN THE SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, A. D. 1907.

WHITE-SMITH MUSIC PUBLISHING COMPANY, *vs.* APOLLO COMPANY.	No. 110.
WHITE-SMITH MUSIC PUBLISHING COMPANY, *vs.* APOLLO COMPANY.	No. 111.

PETITION OF THE CONNORIZED MUSIC COMPANY FOR PERMISSION TO FILE A BRIEF, AND ALSO TO MAKE AN ORAL ARGUMENT, ON THE SIDE OF THE APPELLEE.

To the Supreme Court of the United States of America:

Your petitioner, the Connorized Music Company, respectfully represents that it is a corporation, created

and existing in due form of law in the State of New York, and having a place of business on East 144th street and Austin place in the Borough of the Bronx and City of New York; and that it is pecuniarily interested to a large amount in the decision of the above-entitled cases; and that if that decision is to be in favor of the appellant, the White-Smith Music Publishing Company, the resulting pecuniary injury to your petitioner will be very great.

Wherefore your petitioner respectfully prays that your petitioner may be permitted to file a brief on the side of the appellee in said cases and may also be permitted to submit an oral argument on the same side at the time of the hearing of said cases, and before any decision in said cases is rendered by this Court; and your petitioner also prays for such other relief as to the Court may appear to be proper.

And, in support and explanation of this petition, your petitioner respectfully represents the following facts:

First.—Your petitioner's business consists mainly in making and selling special sheets of perforated paper, for use in automatic musical instruments; which sheets are covered by letters patent of the United States, No. 661,920, granted November 13, 1900, to James O'Connor, and which sheets are usable only with a particular construction in automatic musical instruments, and which construction is also covered by said letters patent.

Second.—Your petitioner conducts its business by a contract with each of a number of manufacturers of automatic musical instruments; each of which contracts includes a license to that manufacturer to make and sell

that patented construction, in the instruments of the licensee, and includes an agreement for the purchase, by that licensee or its agents, from your petitioner, of all the sheets of perforated paper which are to be sold with or for those instruments, which agreement is occasioned by the fact that the said patented construction in the said instruments, requires the said patented perforated sheets for use therewith.

Third.—The property of your petitioner which is employed in its said business, consists of machinery, master sheets, and perforated sheets, and other tangible personal property, together with the said letters patent; and that tangible personal property has cost the petitioner nearly one hundred thousand dollars; and those letters patent are very valuable to your petitioner's business.

Fourth.—The Aeolian Company, of Meriden, Connecticut, is a large and wealthy corporation, which is engaged in making and selling automatic musical instruments, and in making and selling perforated sheets of paper for use in those instruments.

Fifth.—There is an association of more than eighty publishers of printed sheet music, which association includes nearly all the principal music publishers in the United States, and the members of which association copyright and publish most of the printed sheet music which is copyrighted and published, from time to time, in this country.

Sixth.—The Aeolian Company has a contract with each member of said association of music publishers,

which contract substantially provides that the Aeolian Company shall have the exclusive right to make and sell perforated sheets of paper to be used in automatic musical instruments, for producing the music represented by any or all of the copyrighted printed sheet music published by that publisher; provided these two cases or either of them is decided by this Court in favor of the appellant, the White-Smith Music Publishing Company.

Seventh.—These suits were actually begun and have been really prosecuted by the Aeolian Company in the name of the White-Smith Music Publishing Company, but at the expense of the Aeolian Company, for the purpose of obtaining such a decision in favor of the White-Smith Music Publishing Company.

Eighth.—If these cases are decided in favor of the White-Smith Music Publishing Company, all the above specified contracts will be thereby put into operation, and will operate to give the Aeolian Company the exclusive right to make and sell perforated sheets, for use in automatic musical instruments, to perform most of the music which the owner of such an instrument would desire to have performed thereby. That monopoly of the right to make and sell most of the perforated sheets which the public would wish to buy would practically result in conferring upon the Aeolian Company a monopoly to make and sell all of the perforated sheets which the public would wish to buy, and also a practical monopoly of making and selling all automatic musical instruments, operated by perforated sheets of paper; because no prospective purchaser of an automatic musical instrument would buy one which could be used by him in play-

ing only a comparatively few tunes, when he could purchase one from the Aeolian Company, even at a higher price, for playing all the tunes which he would desire to have played; and because the Aeolian Company could present this dilemma to every prospective purchaser of an automatic musical instrument, by simply declining to sell any perforated sheet for use in any instrument not made and sold by that company.

Ninth.—Your petitioner's said business would be quite extinguished by a decision of these suits in favor of the appellant, the White-Smith Music Publishing Company; because such a decision would doubtless be speedily followed by bills in equity and preliminary injunctions, issued against your petitioner, and operating to completely stop your petitioner's said business.

Tenth.—The decision of these cases depends mainly and perhaps entirely, upon the proper construction of that clause of section 8 of article I of the Constitution of the United States which authorizes Congress "To promote the progress of science and the useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries"; because the decision of these cases depends mainly, if not entirely, upon the question whether sheets of perforated paper for use in automatic musical instruments (such as those for the sale of which by the appellee, the Apollo Company, these suits were brought, and such as those, the making and selling of which constitute your petitioner's business) are "writings" within the meaning of the Constitution of the United States.

Eleventh.—That Constitutional question was adjudicated in the negative by the Circuit Court in these cases on the grounds stated in that portion of the decision of that court which is printed in lines 33 to 48 inclusive, of page 430 of 139 Federal Reporter.

Twelfth.—That decision of the Circuit Court on that constitutional question was by the White-Smith Music Publishing Company assigned as error in the Circuit Court of Appeals. But that assignment of error was overruled by the Circuit Court of Appeals on the ground that as copyrights did not exist at the common law, the written foundation of the copyright laws of the United States must be strictly construed. (147 Federal Reporter, 226).

Thirteenth.—These cases were argued for the White-Smith Musical Publishing Company in the Circuit Court and also in the Circuit Court of Appeals by Mr. Charles E. Hughes, who is now Governor of New York. He supported the contention of the White-Smith Publishing Company in both those courts by pointing out that the copyright statutes of the United States allow copyrights to cover "musical compositions," as they expressly do in sections 4952 and 4956 of the Revised Statutes as those sections were amended March 3, 1891, and in section 4963 of the Revised Statutes, as that section was amended March 3, 1897, and in section 4965, as amended March 2, 1895, and in section 4966, as amended January 6, 1897. And Mr. Hughes also pointed out that the last of those sections undeniably uses the phrase "musical compositions" to signify music sounding in the air, and he argued with much force that the same phrase has that

same meaning wherever it occurs in the other sections relevant to copyrights, and that therefore it constituted an infringement of the copyrights on the musical compositions which are involved in these cases, to sell sheets of perforated paper which were adapted for use in automatic musical instruments to sound out upon the air the particular musical compositions covered by the complainant's copyrights.

Fourteenth.—There is no logical and conclusive reply which can be made to the above stated arguments of Mr. Hughes, except the reply which is based upon the constitutional limitation of copyrights to "writings"; and therefore the decision of these cases by this court involves the construction and application of the Constitution of the United States.

Fifteenth.—Inasmuch as each of these cases involves the construction or application of the Constitution of the United States; both of these cases are within the appellate jurisdiction of this court under section 5 of the Judiciary Act of 1891, regardless of the amount of money directly involved in these cases respectively.

Sixteenth.—The amount of money which is really involved in the decision of these cases by this court must be many millions of dollars; for a decision of these cases in favor of the appellant, would operate to confer upon the Aeolian Company a practical monopoly throughout the United States for many years of the business of making and selling automatic musical instruments operated by perforated sheets of paper as valve mechanisms therein.

Seventeenth.—The Committees on Patents of the two houses of Congress, have long been engaged in studying the copyright laws of the United States, with a view to the enactment by Congress of a revised and consolidated Copyright Act to cover that department of the laws of the United States. After many months devoted to the consideration of the whole subject, the House Committee on Patents on January 30, 1907, submitted to the House of Representatives a report of eighteen printed pages, which was report No. 7083 of the second session of the Fifty-ninth Congress. That report stated that "A case involving the right to reproduce by mechanical means any copyrighted musical composition, is pending before the Supreme Court of the United States and your Committee felt that further legislation regarding this matter should be postponed until we can know what construction the court will give to the existing law." Inasmuch as the numerous arguments which had been submitted during eight days of hearings to the Committee relevant to the "existing law" of this subject, had been confined to the existing constitutional law and had not included any discussion of the existing statutory law, this statement of the Committee amounted to recommending the House to take no action on this subject until the Supreme Court should have decided the constitutional question which is involved, in these cases, for the cases to which the Committee thus alluded were these two cases of the White-Smith Music Publishing Company *v.* the Apollo Company.

Eighteenth.—Though the fact that Congress is awaiting a decision of the Supreme Court upon a question of constitutional limitations before deciding what statutes

to enact on the subject to which that constitutional limitation refers, is not alone sufficient to cause this court to decide the constitutional question involved; it does appear to be legitimate to call the attention of the Supreme Court to that fact as indicative of the great practical importance of the Constitutional question, when as now, that question is involved in a litigated case pending in the Supreme Court.

Wherefore your petitioner again prays, as it has already prayed, for permission to file a brief and also to present an oral argument on the side of the appellee in the above entitled cases; and your petitioner again prays for such other relief as to the court may appear to be proper.

CONNORIZED MUSIC COMPANY,
by Albert H. Walker
its Counsel.

STATE OF NEW YORK,
County of New York, } ss.:

ALBERT H. WALKER, being duly sworn, deposes and says that he is attorney of the petitioner, the Connorized Music Company, and that he personally prepared the foregoing petition and knows the contents thereof; and that all the statements in said petition are accurately true according to the best and utmost of his information, knowledge and belief, which information was carefully acquired, and which knowledge is mainly of record, and is all thoroughly familiar, and which belief is founded on convincing evidence.

ALBERT H. WALKER.

Subscribed and sworn to by Albert H. Walker before me this eleventh day of October, nineteen hundred and seven.

LEON LASKI,
Notary Public,
New York Co.

SEAL.

IN THE

SUPREME COURT OF THE UNITED STATES.

JANUARY 1908.

WHITE-SMITH MUSIC PUBLISHING COMPANY,

vs.

APOLLO COMPANY.

No. 110.

WHITE-SMITH MUSIC PUBLISHING COMPANY,

vs.

APOLLO COMPANY.

No. 111.

CONSTITUTIONAL COPYRIGHT LAW.

Brief and Argument for The Connorized Music Company.

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BY
ALBERT H. WALKER.

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PREFACE.

Those pages of this book, which are headed by the first ten letters of the alphabet, comprise a copy of the petition of the Connorized Music Company, which was presented to the Supreme Court on October 14, 1907.

Those pages which are headed by Arabic numerals, comprise the Brief and Argument for the Connorized Music Company, filed in the Supreme Court in January, 1908, in pursuance of that petition of October 14, 1907, and in pursuance of the permission which was granted by the Court on October 21, 1907.

This brief and argument are devoted to stating and maintaining the proposition that Section 4966 of the Revised Statutes of the United States, as amended January 6, 1897, and all other statutes of similar import (on which statutes the two suits are necessarily based), are unconstitutional; because purporting to authorize copyrights, on subjects outside of "writings", and because paragraph 8, of Section 8, of Article 1, of the Constitution of the United States, limits all copyrights to "writings".

This constitutional contention is not mentioned in the Brief for Appellee, which was submitted to the Court in these cases, in January, 1908, by Messrs. Burton, Munday, Evarts, Adcock and O'Connell; those gentlemen knowing that it would be the subject of this brief and argument for the Connorized Music Company.

The whole of the following brief and argument for the Connorized Music Company, was written by its subscriber, without any collaboration; and he is personally and professionally responsible for every statement therein. Those statements are numerous, and many of them may appear to be new; but all of them can be verified by whoever will take time enough, and perform labor enough, to follow the clues of the author through the great libraries from which many of them were collected by him, and will also avail themselves of access to his other sources of knowledge.

A. H. W.

PARK ROW BUILDING,
NEW YORK,
JANUARY 10, 1908.

In the Supreme Court of the United States,

OCTOBER TERM, A. D., 1907.

WHITE-SMITH MUSIC PUBLISHING COMPANY, *vs.* APOLLO COMPANY.	No. 110.
WHITE-SMITH MUSIC PUBLISHING COMPANY, *vs.* APOLLO COMPANY.	No. 111.

PETITION OF THE CONNORIZED MUSIC COMPANY FOR PERMISSION TO FILE A BRIEF, AND ALSO TO MAKE AN ORAL ARGUMENT, ON THE SIDE OF THE APPELLEE.

To the Supreme Court of the United States of America:

You petitioner, the Connorized Music Company, respectfully represents that it is a corporation, created

and existing in due form of law in the State of New York, and having a place of business on East 144th street and Austin place in the Borough of the Bronx and City of New York; and that it is pecuniarily interested to a large amount in the decision of the above-entitled cases; and that if that decision is to be in favor of the appellant, the White-Smith Music Publishing Company, the resulting pecuniary injury to your petitioner will be very great.

Wherefore your petitioner respectfully prays that your petitioner may be permitted to file a brief on the side of the appellee in said cases and may also be permitted to submit an oral argument on the same side at the time of the hearing of said cases, and before any decision in said cases is rendered by this Court; and your petitioner also prays for such other relief as to the Court may appear to be proper.

And, in support and explanation of this petition, your petitioner respectfully represents the following facts:

First.—Your petitioner's business consists mainly in making and selling special sheets of perforated paper, for use in automatic musical instruments; which sheets are covered by letters patent of the United States, No. 661,920, granted November 13, 1900, to James O'Connor, and which sheets are usable only with a particular construction in automatic musical instruments, and which construction is also covered by said letters patent.

Second.—Your petitioner conducts its business by a contract with each of a number of manufacturers of automatic musical instruments; each of which contracts includes a license to that manufacturer to make and sell

that patented construction, in the instruments of the licensee, and includes an agreement for the purchase, by that licensee or its agents, from your petitioner, of all the sheets of perforated paper which are to be sold with or for those instruments, which agreement is occasioned by the fact that the said patented construction in the said instruments, requires the said patented perforated sheets for use therewith.

Third.—The property of your petitioner which is employed in its said business, consists of machinery, master sheets, and perforated sheets, and other tangible personal property, together with the said letters patent; and that tangible personal property has cost the petitioner nearly one hundred thousand dollars; and those letters patent are very valuable to your petitioner's business.

Fourth.—The Aeolian Company, of Meriden, Connecticut, is a large and wealthy corporation, which is engaged in making and selling automatic musical instruments, and in making and selling perforated sheets of paper for use in those instruments.

Fifth.—There is an association of more than eighty publishers of printed sheet music, which association includes nearly all the principal music publishers in the United States, and the members of which association copyright and publish most of the printed sheet music which is copyrighted and published, from time to time, in this country.

Sixth.—The Aeolian Company has a contract with each member of said association of music publishers,

which contract substantially provides that the Aeolian Company shall have the exclusive right to make and sell perforated sheets of paper to be used in automatic musical instruments, for producing the music represented by any or all of the copyrighted printed sheet music published by that publisher; provided these two cases or either of them is decided by this Court in favor of the appellant, the White-Smith Music Publishing Company.

Seventh.—These suits were actually begun and have been really prosecuted by the Aeolian Company in the name of the White-Smith Music Publishing Company, but at the expense of the Aeolian Company, for the purpose of obtaining such a decision in favor of the White-Smith Music Publishing Company.

Eighth.—If these cases are decided in favor of the White-Smith Music Publishing Company, all the above specified contracts will be thereby put into operation, and will operate to give the Aeolian Company the exclusive right to make and sell perforated sheets, for use in automatic musical instruments, to perform most of the music which the owner of such an instrument would desire to have performed thereby. That monopoly of the right to make and sell most of the perforated sheets which the public would wish to buy would practically result in conferring upon the Aeolian Company a monopoly to make and sell all of the perforated sheets which the public would wish to buy, and also a practical monopoly of making and selling all automatic musical instruments, operated by perforated sheets of paper; because no prospective purchaser of an automatic musical instrument would buy one which could be used by him in play-

ing only a comparatively few tunes, when he could purchase one from the Aeolian Company, even at a higher price, for playing all the tunes which he would desire to have played; and because the Aeolian Company could present this dilemma to every prospective purchaser of an automatic musical instrument, by simply declining to sell any perforated sheet for use in any instrument not made and sold by that company.

Ninth.—Your petitioner's said business would be quite extinguished by a decision of these suits in favor of the appellant, the White-Smith Music Publishing Company; because such a decision would doubtless be speedily followed by bills in equity and preliminary injunctions, issued against your petitioner, and operating to completely stop your petitioner's said business.

Tenth.—The decision of these cases depends mainly and perhaps entirely, upon the proper construction of that clause of section 8 of article I of the Constitution of the United States which authorizes Congress "To promote the progress of science and the useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries"; because the decision of these cases depends mainly, if not entirely, upon the question whether sheets of perforated paper for use in automatic musical instruments (such as those for the sale of which by the appellee, the Apollo Company, these suits were brought, and such as those, the making and selling of which constitute your petitioner's business) are "writings" within the meaning of the Constitution of the United States.

Eleventh.—That Constitutional question was adjudicated in the negative by the Circuit Court in these cases on the grounds stated in that portion of the decision of that court which is printed in lines 33 to 48 inclusive, of page 430 of 139 Federal Reporter.

Twelfth.—That decision of the Circuit Court on that constitutional question was by the White-Smith Music Publishing Company assigned as error in the Circuit Court of Appeals. But that assignment of error was overruled by the Circuit Court of Appeals on the ground that as copyrights did not exist at the common law, the written foundation of the copyright laws of the United States must be strictly construed. (147 Federal Reporter, 226).

Thirteenth.—These cases were argued for the White-Smith Music Publishing Company in the Circuit Court and also in the Circuit Court of Appeals by Mr. Charles E. Hughes, who is now Governor of New York. He supported the contention of the White-Smith Publishing Company in both those courts by pointing out that the copyright statutes of the United States allow copyrights to cover "musical compositions," as they expressly do in sections 4952 and 4956 of the Revised Statutes as those sections were amended March 3, 1891, and in section 4963 of the Revised Statutes, as that section was amended March 3, 1897, and in section 4965, as amended March 2, 1895, and in section 4966, as amended January 6, 1897. And Mr. Hughes also pointed out that the last of those sections undeniably uses the phrase "musical compositions" to signify music sounding in the air, and he argued with much force that the same phrase has that

same meaning wherever it occurs in the other sections relevant to copyrights, and that therefore it constituted an infringement of the copyrights on the musical compositions which are involved in these cases, to sell sheets of perforated paper which were adapted for use in automatic musical instruments to sound out upon the air the particular musical compositions covered by the complainant's copyrights.

Fourteenth.—There is no logical and conclusive reply which can be made to the above stated arguments of Mr. Hughes, except the reply which is based upon the constitutional limitation of copyrights to "writings"; and therefore the decision of these cases by this court involves the construction and application of the Constitution of the United States.

Fifteenth.—Inasmuch as each of these cases involves the construction or application of the Constitution of the United States; both of these cases are within the appellate jurisdiction of this court under section 5 of the Judiciary Act of 1891, regardless of the amount of money directly involved in these cases respectively.

Sixteenth.—The amount of money which is really involved in the decision of these cases by this court must be many millions of dollars; for a decision of these cases in favor of the appellant, would operate to confer upon the Aeolian Company a practical monopoly throughout the United States for many years of the business of making and selling automatic musical instruments operated by perforated sheets of paper as valve mechanisms therein.

Seventeenth.—The Committees on Patents of the two houses of Congress, have long been engaged in studying the copyright laws of the United States, with a view to the enactment by Congress of a revised and consolidated Copyright Act to cover that department of the laws of the United States. After many months devoted to the consideration of the whole subject, the House Committee on Patents on January 30, 1907, submitted to the House of Representatives a report of eighteen printed pages, which was report No. 7083 of the second session of the Fifty-ninth Congress. That report stated that "A case involving the right to reproduce by mechanical means any copyrighted musical composition, is pending before the Supreme Court of the United States and your Committee felt that further legislation regarding this matter should be postponed until we can know what construction the court will give to the existing law." Inasmuch as the numerous arguments which had been submitted during eight days of hearings to the Committee relevant to the "existing law" of this subject, had been confined to the existing constitutional law and had not included any discussion of the existing statutory law, this statement of the Committee amounted to recommending the House to take no action on this subject until the Supreme Court should have decided the constitutional question which is involved, in these cases, for the cases to which the Committee thus alluded were these two cases of the White-Smith Music Publishing Company *v.* The Appolo Company.

Eighteenth.—Though the fact that Congress is awaiting a decision of the Supreme Court upon a question of constitutional limitations before deciding what statutes

to enact on the subject to which that constitutional limitation refers, is not alone sufficient to cause this court to decide the constitutional question involved; it does appear to be legitimate to call the attention of the Supreme Court to that fact as indicative of the great practical importance of the Constitutional question, when as now, that question is involved in a litigated case pending in the Supreme Court.

Wherefore your petitioner again prays, as it has already prayed, for permission to file a brief and also to present an oral argument on the side of the appellee in the above entitled cases; and your petitioner again prays for such other relief as to the court may appear to be proper.

CONNORIZED MUSIC COMPANY,
by Albert H. Walker,
its Counsel.

STATE OF NEW YORK,
County of New York, } ss.:

ALBERT H. WALKER, being duly sworn, deposes and says that he is attorney of the petitioner, the Connorized Music Company, and that he personally prepared the foregoing petition and knows the contents thereof; and that all the statements in said petition are accurately true according to the best and utmost of his information, knowledge and belief, which information was carefully acquired, and which knowledge is mainly of record, and is all thoroughly familiar, and which belief is founded on convincing evidence.

ALBERT H. WALKER.

Subscribed and sworn to by Albert H. Walker before me this eleventh day of October, nineteen hundred and seven.

LEON LASKI,
Notary Public,
New York Co.

SEAL

CHAPTER I.

The Origin and Development of the Idea of Copyright, Prior to 1787.

Diligent searches, made during the last two centuries, have resulted in ascertaining when and by whom the idea of copyright was first so seriously entertained as to be expressed in any writing which has come down to our own times. The discoverer of that historic event was James Russell Lowell, and he discovered it in one of the prose writings of John Milton. That book was by him named the "Eikonoklastes". It was written in 1649, and published in October of that year, in reply to the "Eikon Basiliké" which had been composed earlier in the same year by Dr. Gaudan, a clergyman of the Church of England, and published and palmed off as an authentic copy of papers written by King Charles I. not long before his execution in January, 1649. The book "Eikon Basiliké" immediately made a profound impression upon the people of England and Scotland, because it purported and appeared to portray, in his own language, many noble and pathetic meditations of the King, in the prospect of his forthcoming execution. To counteract, that impression, Milton was employed on behalf of Cromwell, to write a book in reply to the "Eikon Basiliké" and he did thereupon compose and publish the "Eikonoklastes". It was in that seldom explored book of several hundred pages, that Lowell found the statement that "Every author should have the property of his work reserved to him after his death, as well as living" and he published the fact of that discovery in his introduction to Milton's Areopagitica.

This statement of Milton's opinion is taken as the earliest statement which has come down to us, of the idea of copyright; because the printed arguments of counsel, and the printed opinions of judges, and the printed writings of authors in Europe and America, during the last two centuries have failed to disclose any statement of earlier date, to the effect that authors had or should have any exclusive right, to publish their works during their lives, or to transmit any such right to others when departing.

The only earlier writing which has been thought to express any such idea, is to be found in another of the prose works of John Milton, namely his "Areopagitica" which was once called his speech for unlicensed printing, but which is more accurately named his essay in favor of liberty for the press. That essay was written in 1644, in criticism of the order of Parliament of June 14, 1643, which order subjected all printing to censorship in the future by Parliament, as all printing had been subjected for nearly a hundred years in the past by the Crown. The passage on this subject in the "Areopagitica" in which the idea of copyright has been thought by some persons to be discoverable, is as follows:

"Some of the patentees and monopolizers in the trade of book selling, who under the pretense of the poor in their company, not to be defrauded, and the just retaining of each man his several copy (which God forbid should be gainsaid) brought divers glosing colours to the House, which were indeed but colours, and serving to no end except to exercise a superiority over their neighbors."

Some persons have thought they found the idea of copyright in that part of this prose of Milton, wherein he speaks of the "just retaining of each man his several copy" and wherein he expresses the pious wish that God should forbid such "just retaining" to be "gainsaid". But when this passage is compared with the parliamentary order of June 14, 1643, which it criticised, it will be found that the words "each man" did not refer to any author, but only to such individual members of the Company of Stationers as were in possession of "copy" suitable for printing and publication.

Thus it appears that the ideas of John Milton, upon the subject of printing and publishing, had advanced no further in 1644, than that any man who was in lawful possession of "copy" suitable for a printer to put into type, should be permitted to print and publish that production without any censorship, subject only to legal responsibility for any injury which the publication might cause. But it also appears that in 1649, his ideas had accumulated the additional element that "Every author should have the property of his work reserved to him after his death, as well as living." Although Milton's "Areopagitica" of 1644, and his "Eikonoklastes" of 1649, are seldom examined now, those two writings are entitled to permanent fame, because the "Areopagitica" was the first in modern times to advocate liberty for the press, and because the "Eikonoklastes" was the first in any times, to suggest the idea of authors' copyright.

Much of the literature and many of the laws of ancient Chaldea, Egypt, China, Japan, India, Persia, Judea, Greece, Alexandria and Rome, have been transmitted to modern times, and are known to living scholars; but not a single piece of that transmitted literature, nor one of

those transmitted laws, contains any evidence that the idea of copyright was ever conceived by any ancient author or lawgiver, or occurred to anybody anywhere in ancient times.

The first literature that was ever extensively copied and put on regular sale was the Egyptian book entitled the "Manifestation of the Light", but which afterward came to be known as the "Book of the Dead". Many thousand copies of that book were made and sold in Egypt during many centuries before the Christian era, by hundreds of different scribes, none of whom were subjected to any censorship or any copyright.

The poems of Homer are believed to have been composed about nine hundred years before the Christian era, and they were compiled and reduced to writing about 550 B. C.; but the idea that their compilers or anybody else, were entitled to any exclusive right to make and sell copies of those poems apparently did not occur to anyone. And though Homer did not reduce his works to writing, as Socrates did not, most of the other authors and orators of Greece did so, and many of them caused copies of their writings to be multiplied for distribution among their own contemporaries. Among these was Aristotle, the greatest scientist of the ancient world; and among these also was Demosthenes, the greatest Greek orator, who not only wrote out his orations himself, but himself made copies of those orations for distribution among those who were not present at their delivery.

Rome, during the age of Julius Caesar, and also during the Augustan age, was so devoted to literature that publishers and book-sellers were numerous and prosperous. The commentaries of Caesar and the orations of Cicero, having been written out by them, were promptly

copied in large numbers and sold and published in many cities, throughout the Roman Empire. Indeed, the business of making and selling copies of contemporary writings, was so extensive that the editions of numerous works which were written in the Julian and the Augustan ages, averaged at least five hundred copies each, and sometimes reached a thousand copies or more. The lowest of those numbers was at least equal to the sales of the first complete edition of the plays of Shakespeare; though that edition was printed with type, instead of being written by hand, as was every copy of any writing published in ancient Rome. But none of those writings which have come down to us, nor any of the Roman laws, which in the sixth century of the Christian era were compiled under the Emperor Justinian, contains any suggestion of any custom or law of copyright.

The capitol of the Roman Empire was removed from Rome to Constantinople in the fourth century; and though but little original literature was produced there, before the time of Justinian, the nine hundred years that intervened between the reign of Justinian, and the conquest of Constantinople by the Turks, were centuries of considerable literary production, in fields of thought which though not now interesting to mankind, were then supposed to be of transcendant importance. Nevertheless, that long history of law and letters in the Eastern Empire is as devoid as was the history of ancient Rome, of all suggestion of any law or custom of copyright.

So also, in Western Europe, throughout the thousand years of the Middle Ages, ending with the invention of the art of printing in the middle of the fifteenth century, many men devoted their lives to the production of original writings, or to the copying, with pens, the writings

of other men; but all of those writings and copies which have come down to us, are destitute of any suggestion that anybody ever claimed or even thought that any author had or should have any exclusive right to make or sell copies of any composition.

The two hundred years which passed between the invention of the art of printing in the middle of the fifteenth century, and the publication of Milton's "Eikonoklastes" in the middle of the seventeenth century, included the Elizabethan age; and literature, during that age, reached higher elevations than ever before, or ever since. The great writers of that time were Edmund Spenser, Christopher Marlowe, William Shakespeare and Francis Bacon; while many other stars also shone in the literary heavens, which might have been thought to be stars of the first magnitude if they had not been outshone by that great quartett of writers. The Elizabethan authors took more comprehensive views of life and law than can be found set down elsewhere on any pages not more numerous, but it never occurred to any of them that any author was entitled to a natural right, or a common law right, to prohibit other persons from making, publishing or selling copies of his writings; or if any such idea did occur to any of them, he did not write it down and transmit it to us.

The life of Shakespeare, alone, and what he did and did not do relevant to his writings, are sources from which a complete refutation of the hypothesis of the existence of any custom or law of copyright in his time, can be completely drawn. For though he was a decidedly acquisative and provident business man, he appears to have allowed anybody to make and sell and publish copies of his printed or unprinted productions, without any

attempt to prevent such doings, by an injunction in equity, or to collect damages therefor by an action at law. The first writing of Shakespeare to be printed was "Venus and Adonis", which poem was first printed in April 1593, by Richard Field, a printer in London, who himself obtained a license from the Stationers Company for its production, simply because he was in possession of the manuscript. The only, but the sufficient evidence that Shakespeare consented to that publication, resides in the fact that though his name did not appear upon the title page, he did write and sign a dedication of the poem to the Earl of Southampton, and gave that dedication to Field, to prefix to the printed poem itself. At that time, Shakespeare was only twenty-nine, and unknown to fame, but the literary merits of "Venus and Adonis" were immediately recognized by the critics and by the public of London; and printers and publishers so promptly used their resources to satisfy the demand of eager purchasers, that six additional editions were, by several of them, printed and published within the next nine years, and while Shakespeare was still living in London, to complain and to restrain, if he had had any legal ground for restraint or even for complaint.

The next Shakesperian writing to be printed was printed by Field in May 1594, under the title of "A Booke intitled the Ravyshment of Lucrece." And this book soon became so popular that three more editions of it were published while Shakespeare continued to live in London. He did not, during his lifetime publish any of his sonnets, but they were all published seven years before his death by Thorpe, apparently without his consent being asked, or being thought necessary.

Sixteen of Shakespeare's plays were printed and published in his lifetime without any apparent authority from him. And of these, Richard III was published in five separate editions, as also was the first part of Henry IV. Four editions were likewise published, before Shakespeare's death, of Richard II, and the same number of Hamlet, and the same number of Romeo and Juliet; while Henry V, and Pericles, were each published in three editions; and King Lear, Midsummer Night's Dream, Merchant of Venice, and Troilus and Cressida were each published in two editions; and the second part of Henry IV, Love's Labors Lost, Much Ado about Nothing, Titus Andronicus and Merry Wives of Windsor, were each published in one edition. Thus forty-one editions of some of Shakespeare's plays, and nine editions of some of his poems, were published in his lifetime, without any authority from him, being apparently had or asked. And when he died in 1616, he left in manuscript to mankind, such stupendous tragedies as Julius Caesar, Coriolanus, Antony and Cleopatra, Macbeth and Othello; and such great histories as King John, Henry VI, and Henry VIII, and such beautiful comedies as As You Like It, Twelfth Night, Winter's Tale, Cymbeline and The Tempest, and such minor but still valuable plays as The Two Gentlemen of Verona, Measure for Measure, Comedy of Errors, Taming of the Shrew, and All's Well that Ends Well.

The plays of Shakespeare prove that their author was remarkably well informed in the laws of England; and the fact that nearly half of his plays were published in his lifetime without his authority, and without apparent complaint from him, and the fact that he did not, in his will, mention any copyright in those plays, or any

right of action for infringement of any such copyright, and did not include in the property devised by his will, any copyright in those numerous plays of his which were still unpublished, are facts which abundantly establish the proposition that no copyright law existed in England during the literary lifetime of Shakespeare.

And the same absence of any copyright law also appears to have continued at least as late as the year 1649; because when Milton wrote his "Eikonoklastes" he said that "Every author should have the property of his work reserved to him after his death, as well as living"; for that statement implies that no author at that time *did* have any such right, but only that Milton thought he *should.*

Though Milton in 1644, had written and published his "Areopagitica," in favor of liberty for the press, he did not live to see the press freed from such censorship and restraint as was then in force, and had been in force all the time since during the reign of Queen Mary, nearly a hundred years before. For that censorship and restraint continued in England long after Milton's death, and until the statutory expiration of the last Licensing Act, in 1694.

And though Milton said in his "Eikonoklastes" in 1649, that "Every author *should* have the property of his work reserved to him after his death as well as living"; neither result was ever produced by any law of England, until both were conditionally provided for by an act of Parliament which received the sanction of Queen Anne in the eighth year of her reign, and which went into force in 1710, and which is known in the copyright law, as the Statute of Anne.

During the sixteen years which intervened between the expiration of the last Licensing Act in 1694, and the taking effect of the Statute of Anne, printing and publishing in England was free from censorship and restraint under the authority of the Crown, which it had not before been during nearly a century and a half since its original restraint in the reign of Queen Mary. And during those sixteen years, printing and publishing was free from subjection to any copyright law in favor of any author, as it had always been in England, as truly as elsewhere throughout the world.

The foregoing history proves that there never was any copyright law in England, prior to the Statute of Anne. It is true that this important statement is contrary to the decision of the Court of King's Bench, which was rendered in 1769, in the case of Millar *v.* Taylor, which was the first case in which the question of the presence or absence of any common law copyright was ever litigated. But it is also true that that decision was contrary to the most learned and able opinion which was rendered by any of the four judges who constituted that court when that case was decided; and that it was contrary to the opinion of the Lord Chancellor of England, and of the Chief Justice of the Court of Common Pleas, and of three other English justices, and of ex-Lord Chancellor Camden, and several other lords of parliament, all of whom controverted the views of the three majority judges in Millar *v.* Taylor, when the same question came on to be decided by the House of Lords five years later. And it is also true that the opinion of the three judges in Millar *v.* Taylor was contrary to the historic fact, as that fact has been disclosed to modern

scholarship. Moreover there is some circumstantial evidence which tends to show that that opinion was even relinquished by Lord Mansfield himself (who was one of the three majority judges in Millar *v.* Taylor) when he came to hear the arguments to the contrary, which were presented to the House of Lords in the case of Donaldson *v.* Beckett in 1774.

The case of MILLAR *v.* TAYLOR was first reported by James Burrow in April, 1773, in a book devoted entirely to that case and entitled "The Question Concerning Literary Property, Determined by the Court of King's Bench on 20th April, 1769, in the Case between Andrew Millar and Robert Taylor, with the Separate Opinions of the four Judges, and the Reasons Given by Each in Support of his Opinion." This book was printed in London in 1773, by W. Strahan and M. Woodfall. The preface of the book was signed by James Burrow in 1773, and stated that the "detached piece" (which contains 127 folio pages) is a "Report of the Case of Literary Property" of which another report by the same man is to form a part of the fourth Volume of his regular reports of Cases in the King's Bench, since Lord Mansfield's coming to preside in that Court."

The fourth volume of Burrow's regular reports was printed twenty years later, and has since been generally cited as if it were the true source of information in the case of Millar *v.* Taylor. But his first and elaborate report of 127 folio pages, is superior to his report in the fourth volume of his regular reports.

At the time Millar *v.* Taylor was decided, Lord Mansfield had been Chief Justice of the Court of King's Bench for thirteen years, having been elevated to that place in 1756, at the same time that he was made a mem-

ber of the House of Lords, by being elevated to the peerage, as Baron Mansfield. The other judges who sat in the case of Millar *v.* Taylor, were Justices Yates, Aston and Willes. All four of these judges rendered elaborate opinions upon the question involved in the case.

Justice Willes, who delivered the first opinion, formulated that question as being "Whether the Copy of a Book or literary Composition belongs to the Author by the Common Law"; and he defined the phrase, "Copy of a Book" to signify the sole right of printing, publishing and selling, and thus gave that phrase the same definition which is now ascribed to the word copyright. Justice Willes voted in favor of the proposition that what he called the "copy", and what we call the copyright, of a book or literary composition, did belong to the author by the common law of England. He supported that vote by an elaborate argument in two essential parts. One of those parts was based upon some records, which Justice Willes understood to refer to the history of the law of England, during the preceding two hundred years. The other part was based upon what Justice Willes understood to be the natural law of right and justice. But although Justice Willes held that either, and particularly both, of these arguments supported the proposition that according to the common law, an author of a book or literary composition had the sole right of printing, publishing and selling copies thereof, he also said that "All the knowledge which can be acquired from the contents of a book is free to every man's use".

Justice Aston also rendered an elaborate opinion agreeing with Justice Willes, particularly upon the proposition that authors were entitled to copyrights according

to natural law and justice. And he also agreed with Justice Willes in limiting copyright to printing, publishing and selling copies of books and literary compositions, as distinguished from other methods, of conveying ideas or sentiments; for he said that "It is when sentiments are communicated to sight and understanding by printing, that a Work becomes property."

JUSTICE YATES elaborately controverted the opinions of Justices Willes and Aston in both their divisions; for he elaborately contended that there was no evidence whatever to be collected from the literary and legal history of England, in support of the hypothesis of any common law copyright; and he also said that that theory was inconsistent with some of the recognized principles of the common law on other subjects, and that it was inconsistent with the law of natural right and justice. On the latter point, Justice Yates presented many arguments in the negative, some of which he expressed as follows: "All property has its proper limits, extents and bounds." "A tangible thing is capable of exclusive possession and therefore of exclusive property, but this is not true of any idea." "To give one man the exclusive right to express a particular idea is unnatural, for another man may happen to conceive the same idea, and should be permitted to express it if he does." "That every man is entitled to the fruits of his labor I readily admit. But he can only be entitled to this according to the fixed order of things, and subject to the general rights of mankind, and the general rights of property." "He must not expect that these fruits shall be eternal; that he is to monopolize them to infinity; that their increase shall be confined to himself alone and never revert

to the common mass. In that case the injustice would lie on the side of the monopolist, who would thus exclude mankind from enjoying their natural and social rights."

The drift of the argument of Justice Yates was to the effect that natural property inheres only in things which can be kept in exclusive possession, which is not true of ideas; and that artificial property in ideas, can be supported by legislation only, and ought not to be unlimited in time.

Lord Chief Justice Mansfield closed the consideration of the case of Millar *v.* Taylor by endorsing the opinions of Justices Willes and Aston, and by adding some statements of his own to support their conclusion, which conclusion was, by his adherence, made the decision of the Court. The most imporant of those added statements of Lord Mansfield were two in number.

The first of these was his statement that the word "Copy" had been used for ages to signify "the incorporeal right to the sole printing and publishing of somewhat intellectual, communicated by letters." But Lord Mansfield did not in his opinion in Millar *v.* Taylor, or at any other time, establish any historicity for that statement. Indeed, it is difficult to say how he could have made the statement at all, in view of the fact that he had just heard Justice Yates elaborately show the contrary to be true, in the history of England, and in view of the fact that he said nothing cogent to overthrow the argument of Yates upon that historical point; and in view of the fact that his opinion is destitute of any evidence that he had made any investigation in the law or literature of any other country, for the purpose of ascertaining the usage of ages relevant to the subject which he was discussing.

The other important statement of Lord Mansfield was to the effect that during many years at the Bar, prior to his elevation to the bench, he had advised many clients that there was common law copyright in England. Indeed, he had committed himself to that view thirty years before, in the case of Tonson *v.* Walker, which was a bill in equity filed in 1739, and in which Lord Chancellor Hardwicke had granted a preliminary injunction in pursuance of a default, and without any adjudication; though he made a memorandum of doubt as to the existence of any common law copyright, and never did, during his life, give any judicial adherence to that theory.

In our times, judges are generally inclined to absent themselves from the bench, and leave decisions entirely to their colleagues, when great questions are argued, before courts sitting *in banc,* which they have formerly argued at the Bar; but Lord Mansfield did not couple his statement that he had travelled with the question for many years at the Bar, with any indication that he felt any delicacy in taking part in the decision of the question on the Bench. However, that fact did not legally disqualify him from being one of the majority of the court in the case of Millar *v.* Taylor; and that majority did decide that the common law of England contained a rule to the effect that the author of a book or other literary composition always had and still possessed a permanent, exclusive right to print, publish and sell copies of that book or composition.

The case of Millar *v.* Taylor and the decision of the court of King's Bench therein, have been the subject of much consideration by authors, lawyers and judges in England and in the United States, from time to time, dur-

ing a century and a third. But those lawyers, authors and judges have nearly or quite all of them overlooked another decision of a still higher court of another English speaking country, and which decision was contrary to that in Millar *v.* Taylor, and was much better supported by numbers and weights of opinions, and also by learning and by logic. I am now mentioning and shall next explain the decision of the Court of Sessions of Scotland upon the question of literary property, in the cause of John Hinton of London, book-seller, *v.* Alexander Donaldson and others, book-sellers of Edinburgh.

THE COURT OF SESSIONS was the highest court in Scotland in 1773, and this case of Hinton *v.* Donaldson was argued before a bench of thirteen judges, holding that court in that year. Among the counsel for the defender was James Boswell, Esquire, an advocate of Edinburgh, who afterward achieved permanent literary fame as the author of the life of Samuel Johnson. Boswell not only made one of six arguments which the judges praised highly, but he also published a report of the case, including copies of the written opinions of all of the judges who delivered written opinions, and who included all but two or three of those who heard the case. That report of Boswell was printed in Edinburgh in 1774, under his direction.

The arguments in this case of HINTON V. DONALDSON were made by three advocates on each side, and lasted four days, beginning July 20, 1773. On July 27, the court sat to announce its decision, and on that occasion ten of the thirteen judges who occupied the bench delivered carefully prepared written opinions, in the following order, and to the following effect:

Lord Kennet took and elaborately maintained the ground that literary property is not in the law of nature, saying among other things that "The law of nature is not founded on metaphysical arguments and to be deduced from long abstruse and abstract reasonings"; but that on the contrary "It must be obvious to mankind, at least as soon as it is proposed." He also took the ground that literary property was never in the law of Scotland, except in the Statute of Anne; which statute, having been enacted two years after the union of England and Scotland into the Kingdom of Great Britain, was in force in both those parts of that United Kingdom. On this point, Lord Kennet said "Copyright was never mentioned by any writer on the law of Scotland, except by Lord Bankton when treating of the Statute of Anne." And he also said that all Scotch lawyers who were also authors, had shown that they had no belief in any common law copyright in Scotland, by taking out letters patent from the Crown to cover the printing of their respective works. Having analytically reviewed the law of nature, and historically reviewed the law of Scotland, Lord Kennet concluded by announcing his opinion to be, that there was no foundation for exclusive copyright to be found in either of those sources of jurisprudence.

Lord Auchinleck, in speaking of the question of the presence or absence of any law of copyright, other than the Statute of Anne, said, "This question has never received a judgment in any court of Europe, except lately in England." Although his Lordship did not mention the case of Milllar *v.* Taylor by name, that must have been the case to which he alluded, because it was the only case in which such a judgment had then been rendered in England. Proceeding to argue the question to which he referred, he followed Lord Kennet in taking the ground

that copyright is not in the law of nature. He illustrated that point by saying: "If a man throws out a thing in company, whether instructive or entertaining, can he maintain that he has a right of property in his *bon mot* to him and his heirs forever?" His Lordship appeared to think that this question could reasonably be answered only in the negative. Mark Twain has sometimes advocated the view that the law of nature requires the recognition and enforcement of permanent copyright in literary productions; and as his literary productions consist partly in *bon mots*, it appears that he would answer the question of Lord Auchinleck in the affirmative, and thus confine to himself and his heirs forever, the exclusive right to repeat all Mark Twain jokes. But if his heirs should happen not to inherit his skill in uttering those numerous witty and humorous passages, it would apparently be necessary to make the permanent properties therein, assignable, or make them foundations for licenses, so that humorists in future times could purchase privileges for repeating to future generations some or all of his copyrighted humor and wit.

Having thus disposed of the claim that copyright is founded on the laws of nature, Lord Auchinleck turned attention to the historical view, and said that "Before the art of printing, there was no attempt to assert, the author's property in any book which had been published", and that "To this day no law anywhere prohibits *written* copies". And that "If copyright were founded on the common law, it would reach against manuscript copies as well as printed ones, and this demonstrates that there is no common law property in authors". "Nor" (said his Lordship) "does any law forbid oral recitation of any literature; nor in extemporaneous speeches is there any copyright."

Lord Hailes in agreeing with the opinion of Lords Kennet and Auchinleck, said that there was not a vestige of copyright law in Scotland other than the Statute of Anne, and that all Scotch authors have always acted as if they had no copyright.

Lord Monbodo explained that Lord Hardwicke (who had granted several preliminary injunctions in undefended copyright cases) would give no opinion on the question of the presence or absence of common law copyright in England; but that he himself held upon that question, the opinion of the majority of the English judges in the case of Millar *v.* Taylor. Though holding with those judges, that there was a common law copyright independent of the Statute of Anne, Lord Monbodo said that he would allow every man who purchased a book to appropriate the ideas to himself, as much as he could. And his Lordship also said that common law copyright was limited to books, and did not include pictures.

Lord Justice Clerk, said that no vestige of any law of copyright is to be found in the ancient world, and that no trace of such a law even yet existed in any nation except England, and that neither Homer, or Virgil, Chaucer, or Spenser had any idea that they and their heirs and assigns had any exclusive right to copy their works. Turning from the consideration of the laws of other nations to those of Scotland, Lord Justice Clerk said that "The sources of the law of Scotland are the statutes, the Roman law, the ancient customs of Scotland, the doctrines of the Scotch lawyers, and the decisions of this court". And he found all these sources of law to be destitute of any law of copyright, other than the Statute of Anne.

Lord Kames, in giving his reasons for denying the existence of any common law copyright in Scotland, said that "Before printing was invented, manuscripts might be multiplied at pleasure"; and having thus supported the non-existence of copright by immemorial custom, he took the ground that such a law would be contrary to social justice; on this point inquiring, "Why was man made a social being, but to benefit by society and to partake of all the improvements of society in its progress toward perfection."

Lord Gardenstone, speaking of the arguments which had been presented by the six advocates, said, "I do not believe that this question has been debated with greater ability, than by the Scotch Bar". Proceeding to discuss the question, he said, "I admit into our common law, every principle of justice which have been allowed and received as principles of justice by other civilized nations", and that "It is admitted that there is no foundation for copyright in the civil law", (meaning the law of Rome) and that "For above three hundred years, and ever since the invention of printing, all the nations and states of Europe have, by their practice, established the nature of an author's right. They have all concurred in granting no more than a temporary privilege". When perhaps alluding to the opinion of Lord Mansfield in the case of Millar *v.* Taylor, in favor of the theory of permanent common law copyright in England, Lord Gardenstone said, "The splendid error of one great man may mislead many; but I cannot easily be induced to think that the concurring sense and practice of nations is erroneous." On the question involved in the case, Lord Gardenstone said, "I am of the opinion that it would be neither just nor expedient to allow property by common law to authors, in their works after publication".

Lord Coalston said that he regarded the monopolistic consequences of common law copyright as very important and that "Common law copyright is acknowledged in no country except England, and even there, only in one case by a divided court, and even there the question is now pending in another case on appeal". In expressing his conclusion of the absence of common law copyright in Scotland, Lord Coalston based his opinion not only on historical grounds, but also upon his view that there is no natural property in ideas, and that where a book is sold without condition, the purchaser has as much right to copy it as he has to lend it.

Lord Alva, in expressing his concurrence with the opinion of the absence of common law copyright, said that, "Copyright law is a creature of civilized society and refined policy, and will go no further than is expressly established by custom or statute". His Lordship added that he did not envy any country where either common law or statute law might carry copyright law further than it was carried by the Statute of Anne, in the United Kingdom of Great Britain.

The Lord President of the court concluded the discussion of the case by saying that he found no common law copyright in Scotland.

The question of the presence or absence of such a law in that country, being submitted by the Lord President to the votes of his twelve associates, eleven of them voted that no common law copyright was known to the laws of Scotland.

The great case of Donaldson *v.* Beckett was argued before the House of Lords, and decided by that tribunal in February 1774. That case in that court was an appeal from an injunction which had been decreed by Lord

Chancellor Apsley to enforce an alleged common law copyright, in the case of Beckett *v.* Donaldson in the high Court of Chancery; which injunction had been issued in deference to the decision of the Court of King's Bench in Millar *v.* Taylor.

The proceedings in the House of Lords in the case of Donaldson *v.* Beckett, and the decision of that case by that tribunal, were undoubtedly well known and correctly understood by the lawyers and statesmen of the eighteenth century. But some of the authors and lawyers who undertook to expound that case in the nineteenth century, were much mistaken in their expositions, partly because they were misled by that inferior report of the case which they examined, in the fourth volume of Burrow, and partly because they apparently read that report in the light of the more modern constitution of the House of Lords, instead of in the light of the constitution of the House of Lords, as it existed when Donaldson *v.* Beckett was decided in 1774.

The next few paragraphs of this brief are devoted to an exposition of the case of Donaldson *v.* Beckett, in the light of the contemporaneous parliamentary record of that case, and of the constitution of the House of Lords as it existed at that time.

The best report of the case of Donaldson *v.* Beckett is contained in Volume 17 of the Parliamentary History of England on pages 953 to 1004 inclusive. That report shows that the hearing of the case began on February 4. 1774, and ended with its decision twenty-two days later. At that time, the House of Lords consisted of two Archbishops and twenty-four Bishops, and of many peers of the realm (including dukes, marquises, earls, viscounts and barons), and of sixteen Scotch peers who had been

selected by election from among all the body of the Scotch nobility, to represent Scotland in the House of Lords. None of the judges in England were members of the House of Lords, excepting only Lord Mansfield, who was not only a judge, but was also, and independently, a peer. But though no judge had any right, as such, to take any part in any proceedings in the House of Lords, it had been customary for five centuries, beginning in the reign of Edward I, to summon judges of the common law courts to attend the House of Lords, from time to time, in an advisory capacity, whenever the Lords thought they needed the assistance of official persons learned in the law, to draft bills to be considered by Parliament, or to render opinions upon legal or constitutional questions. Stubbs' Constitutional History of England, Vol. III, Section 754.

In pursuance of this historic custom, all the twelve judges of the three common law courts were summoned to attend the House of Lords in the case of Donaldson *v.* Beckett, and to hear the arguments of counsel in that case, and afterward to deliver their own opinions upon the questions argued, so as to enable the Lords of Parliament to decide that question, not only in the light of the arguments of counsel, but also in the light of the advisory opinions of the judges.

The twelve judges who attended in pursuance of that summons were Lord Mansfield, then Chief Justice of the Court of King's Bench; Lord Chief Justice DeGrey of the Court of Common Pleas; Lord Chief Baron Smythe, of the common law division of the Court of Exchequer, and the three associate justices of each of those courts. The associate justices of the Court of King's Bench included Justice Blackstone, who had been raised to that

Bench from the Bar since the decision of the case of Millar *v.* Taylor, in place of Justice Yates, who had died in the meantime; Blackstone having been one of the counsel for the plaintiff in that case.

The senior counsel for the parties in the case of Donaldson *v.* Beckett were Attorney General Thurlow for the appellant, and Solicitor General Wedderburn for the appellee; both of whom were afterward successively Lord Chancellors of England.

Mr. Thurlow in his opening argument, took the ground that there can be no natural literary property, because it would be purely incorporeal, and that the history of printed publications in England negatived the existence of any common law copyright in that country.

Mr. Wedderburn in answering Mr. Thurlow's opening argument, claimed that literary property, though incorporeal, was analogous to advowsons, remainders and reversions, which were also incorporeal, and nevertheless were property. And he also claimed that a common law copyright was inferable from the fact that James I once granted a license to print his own poems, which license implied a royal opinion that the author had a copyright on those poems.

Mr. Thurlow in his reply, said among other things, that the alleged common law literary property was not comparable to advowsons, remainders or reversions, because they, though themselves incorporeal, were based on corporeal things; and that all natural property must be either corporeal itself, or derive its existence from something of a corporeal nature, which was not true of the alleged common law copyright. And he held that the license granted by James I, was granted as a king controlling a censorship, and not as an author controlling a copyright.

Counsel on both sides having been heard, five questions in writing were formulated and agreed to by the Lords and put to the twelve judges present. Thereupon the House adjourned for six days in order to give the judges time to prepare their answers to those questions. The first three questions were formulated by the Lord Chancellor, who was presiding over the House; but the last two were formulated by Lord Camden, as expressing more precisely the exact questions which were before the House for decision. These two questions were as follows:

"IV.—Whether the author of any literary composition, and his assigns, had the sole right of printing and publishing the same, in perpetuity, by the common law?"

V.—Whether this right is in any way impeached, restrained or taken away by the Statute of 8th Anne?"

When the House of Lords assembled to hear the answers of the twelve judges to the propounded questions, eleven of those judges delivered their answers in due order. Seven of those eleven answered question IV in the affirmative, and four answered it in the negative; while six answered question V, in the affirmative, and five in the negative.

It was question IV, that involved the existence or non-existence of permanent common law copyright in England, prior to the Statute of Anne. The seven judges who informed the House of Lords that in their opinion such a common law copyright existed in the law of England were Justices Nares, Ashhurst, Blackstone, Willes, Aston and Gould and Lord Chief Baron Smythe. The four judges who informed the House of Lords that in their opinion no such common law copyright existed in the laws of England, were Baron Eyre, Baron Perrott, Baron Adams and Lord Chief Justice De Grey.

The report of the case in the Parliamentary History of England says nothing at this point about Lord Mansfield, except that "Lord Mansfield declined speaking as a judge". This entry was made by the reporter at the conclusion of his report of the opinions of the eleven judges who rendered opinions, and before his report of any of the speeches of the four peers who delivered speeches upon the question before the House. And it being improbable that the reporter ventured to write down the entry in any other language than that used by Lord Mansfield himself; the entry indicates that after all the judges had spoken, Lord Mansfield being the senior judge present, rose and said that he declined to speak as a judge, and thus implied that he might be expected to speak as a peer. Thereupon the questions, upon which the eleven judges had rendered their advisory opinions, were taken up for discussion and decision by the House of Lords itself.

Lord Camden, who had formerly been Chief Justice of the Court of Common Pleas, and afterward Lord Chancellor, but who did not then occupy any judicial position, took the floor and delivered the first of the speeches which were delivered by those of the Lords present who addressed the House, before the House voted whether to affirm or reverse the decree of the court below.

At this time Lord Camden and Lord Mansfield were generally recognized as the most learned jurists and most eloquent forensic orators in England. Lord Mansfield, under his family name of William Murray, and Lord Camden under his family name of Charles Pratt, were preeminent members of the English Bar, until Murray was made Chief Justice of the Court of Kings Bench, and raised to the peerage as Baron Mansfield, at the age of

52 in 1756, and until Pratt was made Chief Justice of the Court of Common Pleas, at the age of forty-eight in 1762. Pratt continued to be Chief Justice of that Court until 1765, when he was raised to the peerage as Earl Camden, and still longer till he was made Lord Chancellor, in 1766. His learning as a lawyer is indicated by the fact that only one of the decrees which he rendered during the years in which he conducted the high Court of Chancery, was reversed on appeal to the House of Lords, and one of his successors, Lord Eldon, afterward said that Lord Camden's decision was right also in that case.

When Lord Camden entered the House of Lords in 1765, Lord Mansfield had been sitting there for nine years, and had wielded undisputed supremacy there, since the death of Lord Hardwicke in 1764; but he dreaded the contest for supremacy which he foresaw from the coming of Lord Camden. It was this great man who took the floor as a peer immediately after Lord Mansfield had declined to speak as a judge in the case of Donaldson *v.* Beckett; and thereupon he proceeded to deliver to the Lords an elaborate, learned and eloquent argument against the theory of the existence of any common law copyright in England, at any time in the history of that country. The following points are among those which Lord Camden made in his speech.

Printing was free for the first fifty years after its introduction into England, in the latter part of the fifteenth century. Thereupon for the next hundred years, and until the time of the commonwealth, printing was exclusively subject to the Crown through the Stationer's Company, which paid no attention to any rights of authors, but only to the physical possessions of manu-

scripts. Never prior to the Statute of Anne, which went into effect in 1710, was any action brought in any English court for infringement of any copyright, nor any claim made in any form of legal proceeding, that any copyright law existed on behalf of any author.

After showing the historic absence of authors' copyright, from the laws of England prior to the Statute of Anne, Lord Camden proceeded to argue that the idea of permanent copyright is contrary to natural law, delivering, among others, the following sentences: "They forget their creator as well as their fellow creatures, who wish to monopolize his noblest gifts and greatest benefits." "Why do we enter into society at all, but to enlighten one another's minds and improve our faculties, for the common wellfare of the species?" "Those great men, those favored mortals, those sublime spirits, who share that ray of divinity which we call genius, are entrusted by Providence with the delegated power of imparting to their fellow creatures that instruction which heaven meant for universal benefit. They must not be niggards to the world, or hoard for themselves the common stock."

When Lord Camden had finished his speech against the theory of common law copyright in England, it was up to Lord Mansfield to reply to that speech if he could; for he must have known that no other man present could compete with Lord Camden in either eloquence or learning. But Lord Mansfield, having declined to speak as a judge, now failed to speak as a peer. He allowed the speech of Lord Camden to go substantially unanswered; for only one of the Lords present, and he the youthful and non-professional Lord Lyttleton, said anything in opposition to the speech of Lord Camden.

Lord Chancellor APSLEY now followed Lord Camden with a speech in which he announced that though he himself as Lord Chancellor had made the decree in the court below, from which the pending case had been brought by appeal to the House of Lords, he was convinced that the decree was wrong, and therefore favored its reversal.

The Bishop of CARLISLE and Lord EFFINGHAM made speeches in which they contended, as had Lord Camden and the Lord Chancellor, that common law copyright was unknown to the laws of England, and was contrary to the public policy. And still Lord Mansfield had nothing to say in support of that contrary view which he had announced five years before when sitting as Chief Justice in the Court of King's Bench, in the case of Millar *v.* Taylor. The only entry made by the reporter at this point was simply: "Lord Mansfield did not speak."

No other member of the House of Lords, rising to speak after Lord Effingham had finished his argument, the House proceeded to vote upon the question whether the decree of the court below should be affirmed or should be reversed, and thirty-three Lords voted upon that question.

Those who voted to affirm, were the Duke of Northumberland, the Duke of Portland, the Marquis of Rockingham, Earl Carlisle, Earl Fitzwilliam, Viscount Dudley, Viscount Torrington, Lord Bruce, Lord Lyttleton, the Archbishop of Canterbury, and the Bishop of Chester, being eleven Lords in all.

Those who voted to reverse the decree, were the Duke of Bolton, the Duke of Roxburgh, the Earls Abercorn, Denbigh, Gower, Jersey, Loudon, Northingham, Oxford, Radnor, Roseberry, Sandwich and Spencer, and Viscounts Falmouth, Say & Seal, and Weymouth, and Lords

Camden, Montague and Ravensworth, and the Bishops of Coventry, Litchfield and St. Asaph, being twenty-two Lords in all.

Lord Mansfied having first refused to deliver to the House of Lords any opinion in his capacity as a judge, and having omitted to make any speech in his capacity as a peer, omitted also to vote upon the question of affirming or reversing the decree of the Lord Chancellor in the court below. And that decree was reversed by a two-thirds vote of the House of Lords, which was, as it still is, the highest judicial tribunal known to the laws of Great Britain.

Some writers have written that the question which the House of Lords decided in this case of Donaldson *v.* Beckett, was not the question "Whether the author of any literary composition and his assigns had the sole right of printing and publishing the same in perpetuity, by the common law", but only the question "Whether this right is in any way restrained, impeached or taken away by the Statute of 8th Anne". It is true that a reversal of the decree would logically result from deciding the first of those questions in the negative, without deciding the last question at all, or would result from deciding the last question in the affirmative without deciding the other question at all. Therefore the fact that the House of Lords voted, by a vote of twenty-two to eleven, to reverse the decree, does not alone show whether that reversal was based upon a negative decision of the first question, or upon an affirmative decision of the last question. But there is a strong probability that the twenty-two Lords who voted for reversing the decree, all based their votes upon the negative of the first question; because the negative of the first question was what gov-

erned Lord Camden and all the other Lords who made speeches, after the judges had delivered their advisory opinions.

Now, that circumstantial evidence which tends to show that Lord Mansfield, after hearing the arguments of four counsel and the opinions of the eleven judges who delivered opinions, and the speeches of the five Lords who addressed their colleagues in the case of Donaldson *v.* Beckett, became convinced that he had been wrong in the decision in which he participated in the case of Millar *v.* Taylor, is evidence which consists of the following circumstances: 1. The arguments which were made in his hearing by Attorney General Thurlow and his colleague, Sir John Dalrymple, and by Baron Eyrie, Baron Perrott and Baron Adams, and by Lord Chief Justice De Grey, and by Lord Camden and by Lord Chancellor Apsley and Lord Effingham and by the Bishop of Carlisle, were strong enough to convince anybody, that there never was and never ought to be any common law copyright in England. 2. The persistent silence of Lord Mansfield, and his omission even to vote, cannot be accounted for on any other theory than that he was too honest to adhere to his former opinion, and too proud to acknowledge that it was wrong.

Twenty years after this case of Donaldson *v.* Beckett was decided, James Burrow published the fourth volume of his reports of cases in the Court of King's Bench. In that volume he properly included a report of the case of Millar *v.* Taylor, and as an unofficial appendix to that report, he printed, under the name of Millar *v.* Taylor, his report of the case of Donaldson *v.* Beckett (4 Burrow, 2408 to 2417). That report was during the nineteenth century, almost the only report of that case consulted by American authors, lawyers and judges. But the report

of Burrow was so faulty, that it misled everybody who consulted it, except such as knew enough about the constitution of the House of Lords in the eighteenth century, and about the history of the case of Donaldson *v.* Beckett to avoid that misleading. In a later part of this brief, an explanation will be made of how and where that report of Burrow misled learned counsel in the Supreme Court, and one justice of that tribunal, in the nineteenth century upon the main significance of the case of Donaldson *v.* Beckett. But it did not mislead any of the framers or ratifiers of the federal constitution, for it was not printed till five years after the establishment of the federal government.

This is a proper place in which to comment on one statement in Burrow's report relevant to Lord Mansfield, namely:

"It was notorious that Lord Mansfield adhered to his opinion, and therefore concurred with the seven (referring to the seven judges who had given opinions in favor of common law copyright). But it being very unusual (from reasons of delicacy) for a peer to support his own judgment upon an appeal to the House of Lords, he did not speak."

This statement of Burrow is disentitled to weight for the following reasons:

1. It was never proper to insert in any law report any statement of the opinion of any judge, in any case wherein he himself expressly declined to say anything whatever.

2. No such statement was made by the reporter for the regular report in the Parliamentary History of England.

3. No such statement was made in that report of the case which was printed in London the same year the case was decided, and which has come down to our times under the title of "The Pleadings of Counsel before the House of Lords in the Great Cause, concerning Literary Property, together with the Opinions of the Learned Judges, on the Common Law Copyright of Authors and Booksellers, to which are added the Speeches of the Noble Lords who spoke for and against reversing the decree of the Court of Chancery."

4. The case of Donaldson *v.* Beckett was not an appeal from any judgment of Lord Mansfield, but was an appeal from a judgment of Lord Chancellor Apsley, in a case between parties who had never been before Lord Mansfield at all.

5. Lord Mansfield was not too delicate in sentiment to support, in the case of Millar *v.* Taylor, in the court of King's Bench, a view of the law which he had maintained for many years at the Bar, on this question of common law copyright; and he could with much less question of delicacy, and indeed none whatever, support in a court of appeal, the same view of a point of law which he had taken in a lower court, in another case between other parties.

For these reasons, the statement of Burrow, made twenty years after the case of Donaldson *v.* Beckett was decided, and long after Lord Mansfield was dead, has no force to negative the circumstantial contemporaneous evidence which tends to show that Lord Mansfield kept silence in that case, for no other reason than that he was convinced of the error of his former opinion, and was too proud to take it back.

The London booksellers immediately after their defeat in Donaldson *v.* Beckett, induced the House of Commons to pass a new Bill for their relief. That Bill was never printed; but its title indicated that it provided for new terms of copyright on books which had already passed through the terms of copyright prescribed by the Statute of Anne. But the House of Lords rejected this Bill on June 21, 1774, by a vote of 21 to 11; Lord Mansfield not voting either for or against its rejection.

Lord Camden made the principal speech in opposition to the Bill, in which he said that its preamble asserted that prior to the decision in the case of Donaldson *v.* Beckett, it had been the prevailing opinion that there was a permanent common law copyright in the laws of England. But Lord Camden pronounced that statement untrue; for he said that it was within his personal knowledge that nearly all lawyers held the contrary view, ever since he came to the Bar forty years before, and he added his information that the contrary view was also held by all the booksellers in England except those belonging to the Stationers' Company in London, and also by all the booksellers in Scotland, Ireland and America.

This action of the House of Lords, sitting in its legislative capacity in June 1774, so emphatically supplemented its action in February 1774, when sitting in its judicial capacity in the case of Donaldson *v.* Beckett, that no attempt was ever again made in the English Parliament nor in any English court, to maintain any contention that the common law of England ever included any copyright, or to induce Parliament to enact any statute which should, even approximately, have the same effect that a permanent common law copyright would have had if it had existed.

Now it is in order to turn to those copyright statutes of Great Britain which were enacted prior to the time of the framing of our Federal Constitution.

The first of those British copyright statutes is commonly called the STATUTE OF ANNE, and is Chapter XIX of the eighth year of the reign of Queen Anne, and is printed on pages 401, 402 and 403 of Volume IV of the British statutes at large. The principal elements of that statute are the following:

First: "On and after April 10, 1710, the Author of any Book or Books already printed, or the Person or Persons who have purchased or acquired the Copy or Copies of said Book or Books, in order to print or reprint the same, shall have the sole right of printing said Book or Books for twenty-one Years from April 10, 1710, and no longer."

Second: "The author of any Book or Books already composed, and not printed and published, or that shall hereafter be composed, and his Assignee or Assignees, shall have the sole liberty of printing and reprinting such book for fourteen years from the day of first publishing the same and no longer: Provided That after the expiration of the said Term of fourteen years, the sole right of printing and reprinting shall return to the author, if then living, for another term of fourteen years."

Third: "Provided that nothing contained in this Act do extend to Books in any foreign language, printed beyond the Seas."

Fourth: The Statute of Anne also provided an elaborate plan for compelling owners of copyrights to sell the books covered thereby at reasonable prices; which plan authorized divers public functionaries, to fix prices according to their judgments, after which those books

must not be sold at any higher prices respectively, under penalty of five pounds for each sale.

The next British copyright statute which was in force in 1787, was Chapter XIII of the eighth year of George II. That statute was entitled "An Act for the Encouragement of the Arts of Designing, Engraving and Etching historical and other Prints by vesting the Properties thereof in the Inventors and Engravers during the Time therein mentioned." This was the Engraving Copyright Act of 1734.

This statute provided for copyrights for fourteen years, on printed pictures which might be invented and designed and multiplied by means of engraved, etched or otherwise produced printing plates. But this act did not provide any copyright on any picture made otherwise than by printing, and did not cover any printed copy of any prior picture, except in the single case of John Pine, a London engraver, to whom the benefit of the Act was expressly extended, to the extent of covering a set of pictures which he proposed to engrave and publish, from several pieces of tapestry in the House of Lords and in His Majesty's Wardrobe; and other drawings relating to the Spanish invasion of the year 1588.

The next British copyright Act which was in existence in 1787, was the Engraving Copyright Act of 1766, which was Chapter 38 of the seventh year of George III. That statute comprised several amendments to the Engraving Copyright Act of 1734. Those amendments extended the benefit of that Act to all printed pictures, including copies of portraits, and pictures of landscapes, buildings and sculptures, and printed maps, charts, plans and drawings; and those amendments also extended the duration of copyrights on pictures from fourteen to twenty-eight years.

The next British copyright statute was the Copyright Act of 1775, in Chapter 53, of the fifteenth year of George III. That statute was entitled, "An Act enabling the two Universities in England, the four Universities in Scotland, and the several colleges of Eton, Westminster and Winchester, to hold in Perpetuity their Copyright in Books, given or bequeathed to the said Universities and Colleges for the Advancement of useful Learning and other Purposes of Education."

This statute was enacted the next year after the decision of the House of Lords in the case of Donaldson *v.* Beckett, and it recognized the fact that according to the laws of England, no copyright could continue longer than expressly provided by some statute. And though all other copyrights were limited by statutes to terms of years, this statute enacted that certain copyrights belonging to the universities and colleges mentioned therein, should be perpetual. But the statute contained a proviso that it should not extend to any books or copies of books printed elsewhere than on the printing presses of the said universities or colleges, and for their sole benefit and advantage.

The latest British copyright act which was in force in 1787, was the Engraving Copyright Act of 1777. This Act was chapter 67, of the seventeenth year of George III, and like the Act of 1766, it was confined to amending the Engraving Copyright Act of 1734. But the amendments made by the Act of 1777, differed from the amendments of 1766, in that they gave the proprietor or proprietors of a copyright on a picture a right of action for damages against infringers; whereas the Act of 1766 like that of 1734, had not given any right of action for damages, but only a right of action for a penalty in

favor of any person or persons who might sue for the same, to be divided between that party, and the King's Most Excellent Majesty.

These five British statutes, beginning with the Statute of Anne, and ending with the Statute of 1777, comprised the whole of the copyright law of England, at the time of the framing of the Constitution of the United States in 1787.

The scope of that British statutory copyright law had not at that time been extended beyond the literal words of the statutes by judicial construction, except in the single case of Bach *v.* Longman, decided by Lord Mansfield in 1777, and reported by Mr. Cowper on page 623 of his volume of reports.

That case was brought by John Christian Bach, a son of John Sebastian Bach, against Longman, and was based upon the fact that Longman had made and sold printed copies of certain sheet music which John Christian Bach had copyrighted, and which sheet music represented certain sonatas which he had composed.

The defendant's counsel took the ground that Bach's copyright was void because it had no foundation except the Statute of Anne, and because the Statute of Anne did not mention anything but books, as subjects of copyrights. Lord Mansfield overruled this contention by first construing the Statute of Anne to cover "books and other writings" and then holding that the Statute thus construed was broad enough to cover signs and figures, as well as language and letters, saying, by way of illustration, that the figures and symbols of algebra or arithmetic, were as truly copyrightable, as literature in the English language. This being true of the figures and symbols of mathematics, Lord Mansfield held it to be also

true of the signs and symbols of music, and he said that "A musical composition is a writing within the Statute of Anne." But Lord Mansfield also said that a copyright on "a musical composition" would be infringed only by multiplying copies thereof, and not by playing the music represented thereby.

This account of the origin and development of the idea of copyright prior to 1787, has thus far been confined to the eastern hemisphere, and has resulted in showing an entire absence of evidence that any copyright ever constituted any part of the common law or customary law of any country on that side of the world; and in showing that the statutory copyright law of Great Britain never extended prior to 1787, further than to books and other compositions recorded by means of letters, figures or other signs or symbols, and to printed pictures. That law did not include any reproductions of any literary or mathematical composition by means of speech, nor the performance of any musical composition by sounding it out upon the air, nor the reproduction of any copyrighted picture otherwise than by printing. In short, the British copyright law was always limited prior to 1787, to printing, and to publishing and selling printed things.

Let us now, in imagination, cross the Atlantic Ocean from England to America at the beginning of 1787, bringing with us our knowledge of the origin and development of the idea of copyright in the eastern hemisphere prior to that time, with a view to search through the then thirteen States on the western coast of that ocean, and through their literature and laws for such traces as existed in this country, at that time, of the idea of copyright.

Diligent searches made during the last few years, have resulted in ascertaining when and by whom the idea of copyright was first so seriously entertained in the western hemisphere as to cause anyone to do or propose to do anything in the direction of realizing any exclusive or paramount right to print or publish anything. That event occurred in 1782; and the man who then introduced the idea of copyright into this country was Noah Webster, who afterward achieved permanent fame as the author of Webster's Spelling Book and of Webster's Dictionary.

Noah Webster was born in West Hartford, Connecticut, in 1758. He entered Yale College in 1774, but the students being dispersed from New Haven by the exigencies of the Revolutionary War, he completed his four years' course with other students under one of the professors in Glastenbury, Connecticut in 1778. In 1779, he studied law in Hartford, Connecticut, with Oliver Ellsworth, afterward Chief Justice of the United States Supreme Court, and also lived in the family of Ellsworth as tutor of his children; and in pursuance of his legal studies, he was admitted to the distinguished Bar of Connecticut, at Hartford in 1780. His intellectual allegiance was given not only to law, but also to literature and to learning; and being less than twenty-five years old, he decided to devote himself for awhile to those pursuits for a livelihood, while further preparing himself to labor in the field of applied justice. To that end, he established, early in 1782 a select boarding school in Goshen, Orange County, New York; about twenty miles from Newburgh, where Washington's army was encamped awaiting the coming of peace after the capture of the army of Cornwallis. It was at that time and place that Noah Webster

wrote the first manuscript of what he planned to make a series of three school books, the first of which was to be a spelling book, the second a grammar, and the third a reader. Being a poor young man, he could entertain no hope of publishing any of his school books unless he could get credit for the price of the paper, printing and binding, upon the basis of the expected proceeds of the expected sales, and he realized that those proceeds would be precarious, unless he could somehow secure a monopoly of printing and selling his books. On this point it appears that his study of the law with Mr. Ellsworth had made him acquainted with the fact that the House of Lords eight years before, in the case of Donaldson *v.* Beckett, had decided that there was no copyright known to the laws of England. For, many years afterward, but many years before the end of his literary labors, in the course of a correspondence which he conducted with Daniel Webster, he said, "Since the celebrated decision respecting copyright by the highest British tribunal, it seems to be generally admitted that the author has not a permanent exclusive right to the publication of his original works at common law, and that he must depend wholly on the statutes for the enjoyment of his right". This letter was written September 30, 1826, when Daniel Webster was a member of Congress from Massachusetts.

Daniel Webster wrote, on October 14, 1826, a letter in reply to Noah Webster, in which he said, "Property in the social state must be the creature of law; and it is a question of expediency, high and general, not particular expediency, how far the rights of authorship shall be protected." This letter of Daniel Webster also expressly mentioned the opinion which Lord Mansfield had given in the case of Millar *v.* Taylor nearly sixty years before;

but intimated that the writer thought that Lord Mansfield was wrong and that Justice Yates was right in their opposite opinions in that case, relevant to the existence or non-existence of common law copyright in England. But independent of that argumentative issue of Mansfield and Yates, Daniel Webster recognized in his letter to Noah Webster of October 14, 1826, that he quite agreed with the statement in the letter of September 30, 1826, from Noah to Daniel that "Since the celebrated decision respecting copyright by the highest British tribunal, it seems to have been generally admitted that the author has not a permanent exclusive right to the publication of his original works at common law".

This opinion of the absence of any common law copyright in England, was of course abundantly founded in the minds of Noah Webster and Daniel Webster on the decision of the "highest British tribunal" mentioned in the letter of Noah Webster, and which tribunal was of course the House of Lords, and which celebrated decision was of course the celebrated decision in Donaldson *v.* Beckett. But the same opinion must have been confirmed to both Daniel Webster and Noah Webster by the fact that though Justice Blackstone had delivered to the House of Lords an opinion to the contrary, when asked to advise that tribunal upon the point, he had in his Commentaries distinctly appeared to incline to the opinion that copyright was unknown to the common law of England. For in Section 8 of the twenty-sixth chapter of the second book of those Commentaries, as published in England prior to the decision of Donaldson *v.* Beckett, and indeed, prior to the decision of Millar *v.* Taylor, he had thrown strong doubt and indeed, appeared to cast denial upon that theory.

Thus educated, as Noah Webster undoubtedly was in 1782, relevant to the absence of copyright from the common law of England, he was also well enough educated as a lawyer to know the resulting absence of common law copyright in each of the United States. And he also must have known that the Statute of Anne was not in force in the United States; for that statute having been enacted after the establishment of all the thirteen colonies, except Georgia, never was and never purported to be in force in any of them. This point of law was as familiar to the lawyers and law students of 1782 as it is to us, for Blackstone himself had said in Section fourth of the first volume of his Commentaries published in 1765, that though the American colonies were subject to the control of Parliament, they were not bound by any particular act of Parliament, unless particularly mentioned therein.

Noah Webster, being thus informed of the absence of any copyright law in the United States, and having a present personal necessity for such a law to enable him to publish and print his proposed spelling book, grammar and reader, journeyed in the fall of 1782 from Goshen, New York, to Philadelphia, Pennsylvania, for the express purpose of showing his manuscript to influential men there, and invoking their aid toward inducing the legislature of Pennsylvania to enact a copyright law for that state. He made some progress in the direction of promoting friendly interest in Philadelphia, but the legislature not being in session, he returned home to Goshen, passing through Trenton, New Jersey, on his way and calling there upon Governor Livingston, and invoking his influence in favor of the passage of a copyright law by the legislature of New Jersey, when that body should next assemble.

Soon afterward, and in October 1782, Webster sent a petition to the legislature of Connecticut, sitting in Hartford, praying for the passage of a copyright law. And in pursuance of that petition that legislature did in January 1783, pass a copyright statute, which was the first copyright law of any kind that ever existed in the western hemisphere.

Massachusetts in March 1783 followed the example of Connecticut and enacted a similar copyright law, which was introduced into the House of Representatives by the Rev. Timothy Dwight, who was a member of that House that year.

Joel Barlow of Hartford, Connecticut, had been a classmate of Noah Webster in Yale, and in the spring of 1783, he joined with Webster in inducing "The United States in Congress Assembled," under the Articles of Confederation, to adopt a resolution to recommend to the several states, to secure to the authors or publishers of any new books not theretofore printed (being citizens of the United States) and to their executors, administrators and assigns, a copyright of such books for a term of fourteen years from the publication."

The legislature of New Jersey followed the advice contained in that resolution by enacting a copyright statute on May 27, 1783, and thus the seed which Webster had sown in the mind of the Governor of New Jersey the fall before, sprang up and bore fruit in that state.

New Hampshire and Rhode Island soon joined the movement which had been begun in 1782, by Webster, and those states in November and December 1783 respectively, enacted copyright statutes which were substantially like that which had been enacted by Massachusetts in March of the same year.

Thus the initiative and efforts of Noah Webster in less than two years, had resulted in copyright statutes being established in the four New England states and in New Jersey.

Pennsylvania, in March 1784, also enacted a copyright statute, so that the seed which Webster had sown in that state in the fall of 1782, developed into a law in less than two years thereafter. Having thus secured the enactment of copyright laws in all of the northern states except New York, Noah Webster spent six months of the year 1785, in journeying through the southern states for the purpose of securing similar enactments in those states. To this end he started in May 1785, and visited Maryland, Delaware, North Carolina and South Carolina, without immediate success, though all except Delaware enacted copyright statutes prior to 1787. Having done his preparatory work in the summer and early fall of 1785 in those four states, Webster turned his attention to Virginia, and on his way from Annapolis to Richmond, he called on General Washington, at his home at Mt. Vernon, with the hope of securing his powerful assistance. That hope was abundantly gratified, for Washington gave him letters to the Governor of Virginia and to several influential members of the legislature, so that he secured the enactment of his desired copyright law by the state of Virginia almost immediately.

Three states only now remained to be subdued to the color of the Websterian hand, and of these Georgia enacted a copyright law in February 1786, and New York in April of the same year. This history of the establishment of copyright laws in all but one of the thirteen states of the Union in less than four years after Noah Webster instituted the movement in that direction, is interesting

in several respects, including the fact that it indicates that the legislatures of those states recognized the absence of any prior copyright law therein and proceeded promptly to supply that deficiency by the enactment of statutes. For it is not possible that every one of the twelve states could have been induced so promptly to attend to the subject of copyright by statutory enactments, if any influential members of any of the legislatures had supposed that there was already a common law copyright law in this country.

But the absence of any copyright at common law in the United States is proved not only by the unanimous action of the legislatures of the twelve states in enacting statutory copyright laws within four years, but is also proved by the fact that the most diligent searches have failed to disclose any evidence tending to show that anybody, prior to 1782, ever claimed that there was any copyright law in any of the colonies or in any of the states of North America.

CHAPTER II.

The History of the Copyright Clause of the Federal Constitution.

The constitutional convention occupied nearly four months, ending September 17, 1787, in framing the Federal Constitution. But the subject of copyright was not mentioned in that convention until August 18, 1787. On that day James Madison submitted several propositions for powers to be conferred upon Congress, one of which was "To secure to literary authors, their copyrights for

limited times". On the same day, Charles Pinckney submitted several propositions for powers of Congress, one of which was "To secure to authors exclusive rights for a certain time".

Nothing was said or done about either of these propositions on the day on which they were thus submitted, and they received no consideration or action until August 31. On that day a committee of eleven were elected by ballot to report on such parts of the proposed Constitution as had been postponed or not acted on, and which latter parts included the copyright propositions of Madison and Pinckney, and included also another proposition which had been made by Charles Pinckney "To grant patents for useful inventions". The chairman of that Committee of eleven was David Brearley, who was the head of the New Jersey delegation, and who though only forty-two years old, had already been Chief Justice of New Jersey for eight years.

Five days later, and on September 5, 1787, Brearley reported in favor of including among the powers of Congress one which he had formulated as the power "To promote the progress of science and useful arts, by securing for limited times, to authors and inventors the exclusive right to their respective writings and discoveries".

This proposition came before the convention for consideration on the same day, and it was immediately adopted, without opposition and without debate. It was never changed, or proposed to be changed, and was unchanged in the Constitution which was signed by the thirty-nine framers on September 17, 1787. It has always been the only foundation of the copyright laws of the United States.

The intention of the thirty-nine framers of the Constitution, in respect of the scope and significance of the provision which Brearley framed, and they unanimously adopted, to be the foundation of the copyright laws of the United States, is to be learned from the language which they employed for that purpose. And that language is to be interpreted in the light of whatever can be discovered in relation to the knowledge which the thirty-nine framers then had relevant to the law of copyrights and to the subjects thereof in Great Britain and in the United States. Moore *v.* United States, 91 U. S., 274, 1875; Kansas *v.* Colorado, 206 U. S., 95, 1907.

Benjamin Franklin was the oldest and most versatile man among the thirty-nine framers. His knowledge relevant to the matter of copyrights in 1787 may be inferred from the following considerations: He was living in England, as agent for some of the thirteen colonies, from 1764, which was five years before the decision of the Court of King's Bench in the case of Millar *v.* Taylor, until 1775, which was one year after the decision of the House of Lords in the case of Donaldson *v.* Beckett. During that long residence in England he was in frequent conference with members and committees of Parliament, and was so distinguished on account of his social, scientific, philosophical, literary and political attainments that he was personally acquainted with most of the distinguished men in England, and particularly those in the city of London. Among his intimate friends was the Bishop of St. Asaph, who was among the twenty-two Lords of Parliament who constituted the two-thirds majority of the House of Lords, which in the case of Donaldson *v.* Beckett, judicially negatived the theory of a common law copyright in England. Indeed, it was at the

country residence of that friend that Franklin wrote the first twenty-five or thirty thousand words of his celebrated autobiography, which part of that remarkable book covered the first twenty-five years of his life, and which was all of it that he wrote till 1784, when in France he resumed that writing.

The versatile Franklin was certain to be deeply interested in the copyright controversy which occupied extensive public attention in England and in Scotland during several of those ten years' residence in England; and when he returned home to Philadelphia in the early part of 1775 he must have had complete knowledge of the whole subject, and must have known all about the decision of the House of Lords in the case of Donaldson *v.* Beckett; and, indeed, he probably brought back with him a copy of that elaborate report of the case which was printed in London in 1774, the title page of which is quoted in the first paragraph of page 33 of this brief.

Franklin reached Philadelphia on May 6, 1775, and was almost immediately elected to the Continental Congress, where he continued to sit till after he took part in the framing and signing and promulgation of the Declaration of Independence, in 1776. Going to France a few months later to solicit the support of the King of that country on behalf of the United States in our Revolutionary War, he remained there until 1785.

James Wilson, who was afterward one of the associate justices of the Supreme Court of the United States, was another of the framers of the Federal Constitution who undoubtedly knew in 1787 all about the copyright laws of England, and all about the controversy which had ended in that country thirteen years before, relevant to the existence or non-existence of an English common law

copyright. And Wilson also undoubtedly knew all about the copyright controversy in Scotland, which had ended with the decision of the Court of Sessions in 1773, in the case of Hinton *v.* Donaldson, for Wilson was himself a Scotchman who was already highly educated when he emigrated to the American Colonies in 1763, at the age of twenty-one. And though the case of Hinton *v.* Donaldson was not argued and decided in Edinburgh until ten years after he left that city, the Court of Sessions had already rendered a noted copyright decision, in the case of Midwinter *v.* Hamilton, which was certain to be well known to so diligent and able a student as Wilson, even before he left Edinburgh. And though that case was based upon the Statute of Anne, and not upon any alleged common law, the argument and decision of the case involved many important considerations relevant to the philosophical foundation of all copyright laws, as is apparent from a report of the case which was prepared by Lord Kames, and was printed in Edinburgh in a pamphlet entitled "Considerations on the Nature of Literary Property."

Charles Cotesworth Pinckney, though born in South Carolina, had lived many years in England, partly as a student of letters in Oxford University, and partly as a student of law in the Middle Temple in London. He had added to this liberal education in youth a brilliant and conspicuous career at the Bar of his native State, so that when he sat as a member of the constitutional convention at the age of forty-one, he must have known all about the topic of copyrights, as that topic was debated in England during his residence there, and also as it had been made the subject of a statute in South Carolina, and in

most of the other States, during the five years last preceding the constitutional convention.

CHARLES PINCKNEY was only twenty-nine years old when he took part in the framing of the Federal Constitution, but the part he took was so important and so useful, and his career in later life was so distinguished, that he must have been a young man of great learning and great ability. And though he had never been in Europe, he was a relative and an intimate friend of Charles Cotesworth Pinckney, who had resided there for sixteen years, and from whom he doubtless learned much of the laws and public policies of Great Britain. It was Charles Pinckney who produced the form of Section 8 of Article I. of the Constitution, which section is devoted to defining the powers of Congress. And his personal draft of the proposed Constitution, which he presented to the convention soon after it met, contained a section in that particular form, and included many of the clauses of powers of Congress which now exist in the same form, and much the same language, in the Constitution itself. And it was Charles Pinckney who, on August 18, 1787, contributed to the consideration of the convention the proposition to add to the powers of Congress the power "To secure to authors exclusive rights for a certain time."

Several of the members of the constitutional convention, including Roger Sherman of Connecticut, Nathaniel Gorham of Massachusetts and John Langdon of New Hampshire, had long been judges of courts in their respective States, and they must have known the essential facts of the copyright controversies and statutes which had respectively occurred and been enacted in Great Britain, as well as the history of the copyright statutes

which had been enacted in the United States prior to the time of the constiutional convention of 1787.

Taking into account the history of the idea of copyright as that history had been developed in Great Britain, and which history must have been as well known to the members of the constitutional convention of that year as it is to us, and which must have been known to be substantially what our present investigation has found it to be; there is no escape from the conclusion that the constitutional convention, in adopting the provision conferring power on Congress to secure for limited time to authors the exclusive right to their respective writings, knew that they were not doing anything supplementary to any common law, but were laying an original foundation in written constitutional law, upon which Congress might thereafter build a structure of written statutory law of copyrights, and which structure, when erected, would not rest in any degree whatever upon any supposed natural right or ancient custom, or upon any British foundation at all, but should rest entirely upon the consent of the people of the United States, expressed through their expected ratification of the Constitution which the convention was framing.

CHAPTER III.

THE SIGNIFICANCE WHICH THE FRAMERS OF THE CONSTITUTION MUST HAVE INTENDED TO EXPRESS BY THE WORD "WRITINGS."

The fundamental question upon which depends the decision of this case by the Supreme Court of the United

States is the question whether the word "writings" in that clause of Section 8 of Article I of the Constitution, which authorizes Congress to secure for limited times to authors the exclusive right to their respective writings, was intended by the authors of the Constitution to be broad enough to cover a long sheet of paper, which has no sentence in any language written or printed or otherwise expressed thereon, and the essential characteristics of which comprise a large number of holes of uniform widths but varying lengths, punched through the paper at widely scattered locations from end to end thereof, and which sheet of paper, when caused to pass lengthwise over a "tracker board" in an automatic musical instrument, will operate as an air valve to govern movements of air through a large number of holes through that "tracker board," so as to enable those separate air currents to intermittently operate such moving mechanisms in the interior of the instruments as are adapted to actuate hammers striking against wires, to sound out upon the air such successions and combinations of sounds as will constitute audible music.

Such a sheet of perforated paper is not adapted to impart any information through any attempted reading thereof, but is only adapted to be a temporary part of an automatic musical instrument, and which instrument is adapted to receive one or another of such temporary parts from time to time, and to perform a different composition of audible music with each one which it receives.

Counsel for the complainant in both the courts below contended that the perforated sheet in this case, which is adapted to cause an automatic musical instrument to perform the "Little Cotton Dolly" lullaby, is incidentally readable, as a printed "writing" of that

music would be; and therefore *is* a "writing," the characters of which are punched holes, instead of being ink deposits. That contention was and is entirely unfounded, as will appear from the following facts:

First.—That perforated sheet does not contain any horizontal lines or other signs or things to indicate whether the two ranges of holes which extend lengthwise of the paper refer to notes in the treble staff or refer to notes in the bass staff of some sheet music or other, or whether one range of those holes refer to notes in one staff, while the other range refers to notes in the other staff.

Second.—Assuming a good reader of staff notation to be told that one range of holes refers to notes in the treble staff, and that the other range of holes refers to notes in the bass staff, he would have to be acquainted with the construction of the automatic instrument in which the sheet is adapted to be used, in order to infer which range of holes refers to the notes in which staff.

Third.—Assuming that inference to have been correctly drawn, the reader would next hunt over both sides of the perforated sheet to find some indication of the key of the composition. On the back of the sheet he would find the printed words "Key of C," but that would not inform him what is the first note in either the treble staff or the bass staff, because not every musical composition begins either staff with its key note, and few begin both staffs with the key note, and the perforated sheet in question contains no indication whether the first hole in either or both of its ranges of holes is adapted to sound the key note of the composition.

Fourth.—Assuming the reader to be told that the first hole in that range of holes which is adapted to

sound the notes in the bass staff is the key note C, he could not infer what note would be sounded by the first hole in the treble range, because there is nothing on or in the perforated sheet to show whether the first hole in the treble is adapted to sound a note just one octave above, or is adapted to sound a note which is more or a note which is less than one octave above the note which the first hole in the bass range is adapted to sound.

FIFTH.—Assuming the reader to be told that the first hole of the treble range is adapted to sound a note just one octave above the note which the first hole in the bass range is adapted to sound, the reader could not state the names of the notes which would be sounded by the holes throughout the length of the perforated sheet; because those names would then depend upon the distances of those holes from the edges of the sheet, and because those distances vary so little, from degree to degree, that they cannot be accurately measured by any pair of eyes.

SIXTH.—Assuming the reader to draw five parallel lines (after inferring their proper locations from all the above information) lengthwise of the treble range of holes, and then draw similar lines lengthwise of the bass range, he could afterward tell the names of the notes which the holes in each range are adapted to sound. But he could not tell their lengths with any uniform correctness, because the lengths of the holes do not always correspond with the lengths of the notes which they are adapted to sound. Thus, for example, a particular hole may be adapted to sound a quarter note in the legato or connected style, or a half note in the staccato or disconnected style, and no one can tell by measuring the length of that hole in which of those styles it is adapted to sound its note, and thereby tell whether its note is a half note or a quarter note.

SEVENTH.—Assuming the absence of all the above six deficiencies in the perforated sheet as a source of information to a reader of written music, that sheet would still be useless for that purpose, because it contains nothing to indicate the rhythm of any musical composition. In all sheet music, rhythm is indicated by vertical lines crossing the five horizontal lines of each staff. That indication results from the fact that those lines divide that staff into measures, and from the fact that the first note in each measure is accented in the performance, and from the fact that the rhythm of a musical composition depends on how many quarter notes (or their equivalents in other notes) are in each measure. If each measure contains four quarter notes,or their equivalents,the music is in "four-four" time; but if a measure contains only three quarter notes, or their equivalents, the music is in "three-four" time. In the first of these cases the accent of the measure falls on the first note (of whatever length) in its comparatively long series of notes, but in the second case the accent falls on the first note (of whatever length), in its comparatively short series of notes. Thus the locations of the accents in any musical composition depend upon how the notes in a staff are divided into measures. The absence from the perforated sheet of any such division makes it impossible by any inspection of that sheet to locate the accents of any music which it may be adapted to perform. And no musical composition can be read or even be deciphered from any source of information which does not show which of its notes are to be accented. For the locations of the accents are essential to the rhythm. And musical rhythm is so essential to musical character that all recognizable identity may be eliminated from almost any musical composition by

changing its rhythm, without changing its key or changing any of its notes.

Now, the consideration of the question whether the framers of the Federal Constitution intended to make its clause relevant to authors' "writings" broad enough to cover such an unreadable part of an automatic musical instrument as governs the successions and combinations of sounds to be emitted thereby, and thus causes the instrument to audibly perform a particular musical composition, may properly continue with an investigation of the question whether such automatic musical instruments, having such governing parts, were generally known, and were therefore presumably known to the members of the constitutional convention, in 1787.

THE ORIGIN AND DEVELOPMENT OF AUTOMATIC MUSICAL INSTRUMENTS PRIOR TO 1787.

An automatic musical instrument is properly definable as an instrument which can perform music by sounding it out upon the air, whenever it is operated by means of some simple homogeneous mechanical motion, without such complicated heterogeneous mechanical motions as are necessary to be made by the hand or fingers of a musician when performing music with any non-automatic musical instrument. For example, a pianola or a phonograph is an automatic musical instrument. And a piano operated by the fingers of a pianist playing upon the keys, or a harp operated by the fingers of a harpist playing directly upon strings, is a non-automatic musical instrument.

It is impossible in the twentieth century to trace back the art of making and using automatic musical instru-

ments to its origin, because its origin was too ancient to leave so long any record or trace.

The first British patent granted on any automatic musical instrument was granted to Justinian Morse, April 13, 1731, on an automatic organ. The character of that instrument was set forth in that patent in the following language: "A new organ, by which any person, though unskilled in musick, may be taught in an hour's time with great exactness, any musick, though never so difficult, the musick being prickt on both sides of leaves of half inch wainscot, eight or ten psalm tunes being contained on a board about the size of a large sheet of paper and worked by clockwork, or jack or winch."

In the year 1762 an automatic organ was built for the Earl of Bute. It had sixty cylinders, each of which was four and a half feet long. Each of these cylinders was provided with pins projecting from its periphery, which were so placed upon the cylinder that a regular and constant revolution of the cylinder would cause the pins to so operate other mechanism in the organ as to open and close valves in the organ pipes, and thus govern those pipes to audibly perform whatever music was followed in locating the pins on the cylinder.

In 1787 Mr. Cumming built a new cylinder organ for the Earl of Bute, which had fifty-six cylinders, each of thirty-six of which was adapted to cause the organ to audibly perform one of the musical compositions of Handel, and each of the other twenty of which was adapted to perform one or another of the musical compositions of twelve other distinguished composers. This new organ also had several other cylinders, each of which when shifted more or less in position, was adapted to cause

the organ to perform any one of several short and popular melodies or airs.

The Bute organ of 1762 was a costly and extensive instrument, which attracted much attention during the twenty-five years in which it was used in one of the residences of the Earl, till 1787, when it was supplanted by the still better organ of Mr. Cumming. These two organs are described in a still extant pamphlet published in London in 1812, and entitled "Cumming's Machine Organ, a Sketch."

In 1775 there was published in Paris, a still extant, book of 236 pages, which was entitled "La Tonotechnie ou L'Art de noter Les Cylinders." This book was devoted entirely to teaching the art of accurately fixing pins upon the peripheries of cylinders in such positions that when the cylinders were rotated in automatic musical instruments they would so operate the mechanisms of those instruments as to cause them to perform whatever music was indicated in staff notation upon the sheet music which was followed in locating the pins. This French book of 1775 is illustrated by several pictures, one of which represents two men working together fixing pins upon the periphery of a cylinder, in accordance with a sheet of musical notation which one of the men has before him, while the other works on the cylinder. This book is an elaborate work, which proves that the art of making automatic musical instruments was far advanced in Paris in 1775. There can be no ground for doubt that Franklin, when he went to Paris a couple of years later, and remained there for seven years, in association with the best French society, must have heard music performed by automatic musical instruments, worked by such cylinders as those which that book explained how

to make. And hearing such instruments, the ingenious mechanical mind of Franklin was sure to inquire with considerable detail into the art, so that when he returned to the United States he must have brought with him a knowledge of that art as it existed in Paris. Likewise, Franklin, during his residence of eleven years in London, from 1764 to 1775, was sure to learn the essential character of the great automatic organ of the Earl of Bute, which was a celebrated instrument in and about London all the time from 1762 till 1787.

Indeed, it is probable that many small automatic musical instruments or music boxes, having been constructed in Paris in accordance with the directions of the French book of 1775, were imported into the United States, and thus made known in this country to many people during the twelve years that intervened between that time and the formation of the Federal Constitution in 1787; so that the fact of the existence and use of automatic musical instruments was probably known to many of the members of the constitutional convention, in addition to being known to Franklin, who certainly could not have been unacquainted with the existence and essential character of such instruments, as they had long been known in England and in France.

No MATERIALS EXIST out of which to collect any support for the affirmative of the proposition that the framers of the Federal Constitution intended to use the word "writings" in a sense which would confer upon Congress the power to make the copyright of any author cover any automatic musical instrument, or any instrumentality which, when inserted in such an instrument, and simply moved in or through it, would cause that instrument to

audibly perform the music indicated by the staff notation upon a sheet of printed music paper.

On the other hand, the negative of that proposition is the inevitable conclusion to be drawn from the following facts and circumstances:

FIRST.—Neither the dictionary of Samuel Johnson, nor any other dictionary of the English language which has ever been published, formulated any definition of the noun "writing" which included, or could ever be thought by anybody to include, any instrumentality which (like the pin-provided cylinder of the automatic organ of Earl Bute) was adapted to cause an automatic musical instrument to audibly perform a particular musical composition.

SECOND.—Lord Mansfield, who during forty years at the Bar and on the Bench had done and said all he could find to say or do in favor of copyrights, had judicially said, in 1777, that it was no infringement of a copyright on a sheet of printed music to perform the music indicated by signs and symbols and other printed matter on that sheet. Bach *v.* Longman, Cowper's Reports, page 623.

THIRD.—James Madison, who was one of the most studious, learned and influential members of the constitutional convention, and who was the first to submit to the convention any proposition to confer power upon Congress to enact any copyright law, expressly confined his proposition to provide for copyrights in favor of *literary* authors, and thus clearly showed that he was not in favor of authorizing Congress to grant copyrights to cover audible music. And the fact that he himself recorded in his report of the debates of the convention the fact that no one opposed the adoption of the Brearley

report, shows that he was present when that report was made, and shows that he understood the word "writings" therein to have a signification similar to the word "literary" in his own definition of the power to be conferred upon Congress. For if Madison had supposed that the word "writings," as reported by Judge Brearley, would cover a pinned cylinder, or any other mechanical device, for use in an automatic musical instrument, he doubtless would have moved to amend that report, by substituting some such language as that which he had himself proposed, and which nobody would ever contend was broad enough to cover such a pinned cylinder, or any other mechanical musical instrumentality.

FOURTH.—If any delegate had construed the word "writings" in the Brearley report to be broad enough to cover such a pinned cylinder, or other part of an automatic machine, he would have been sure to raise the question of conflict between the word "writings" as thus construed and the word "inventors," which was also employed in the Brearley report; and would have asked Judge Brearley whether it was not objectionable to authorize Congress to confer upon an inventor the exclusive right to make, use and sell a musical instrument contrived by him, and also confer upon an author the exclusive right to use the same musical instrument, as being capable of audibly performing a musical composition contrived by that author, and thus confer upon each of *two* men the exclusive right to use *one* machine.

FIFTH.—If any delegate had discussed the Brearley report, and had taken the ground that natural justice required that an author of a musical composition should have a copyright which would be infringed by any automatic musical machine or part thereof, many of the other

delegates would have seen that that proposition would carry the "natural rights" of authors beyond the limits which had been drawn around those rights by their principal advocate, Lord Mansfield himself, in the case of Bach *v.* Longman, and would have objected to so doing.

SIXTH.—If any delegate, ignoring the decision of Lord Mansfield in Bach *v.* Longman, had reverted to his earlier decision in Millar *v.* Taylor, and also to the published opinions of Judges Willes and Aston in that case (which Lord Mansfield expressly endorsed), and had deduced from those sources the argument and conclusion that "natural right" justifies an author in monopolizing every possible use or expression of his idea, most of the delegates would have remembered that in the case of Donaldson *v.* Beckett, Lord Camden had controverted that view with great eloquence and power. And all the delegates would have inclined to agree with Lord Camden, rather than with Lord Mansfield, upon that issue; because they would have remembered that during the Parliamentary struggle of twenty-one years before, over the question of the repeal of the Stamp Act, Lord Camden was the eloquent and unqualified friend of the Colonies, while Lord Mansfield was an uncompromising advocate of what he claimed to be the right of Parliament to tax the Colonies without representation, and of what he claimed to be the propriety of the Stamp Act itself.

For pages 168 to 181 of Volume 16 of the Parliamentary History of England recorded the fact that in the celebrated debate in the House of Lords in February, 1766, Lord Mansfield elaborately argued that Parliament had a right to bind the Colonies on every subject whatever, regardless of non-representation; and also recorded the fact that Lord Camden, in an elaborate speech

against that contention of Lord Mansfield, delivered the following ardent summary of his contrary view, namely, "My position is this—I will maintain it to my last hour —taxation and representation are inseparable—this position is founded on the law of nature—it is more, it is itself an eternal law of nature."

Lord Camden and Lord Mansfield were both still living in 1787, and nobody could have made any headway in the constitutional convention in any attempt to induce that body to reject the views of Lord Camden, and follow those of Lord Mansfield in respect of the "natural rights" of authors; for the delegates themselves all had profound views on "natural rights," which they knew were shared by Lord Camden and were repudiated by Lord Mansfield. In short, all preaching relevant to "natural rights" coming from Lord Mansfield would have been decidedly ineffective with the self-reliant Americans who in 1787 were establishing a nation, after having overthrown by war Lord Mansfield's pretension of Parliamentary right to bind the Colonies on every subject whatever, regardless of non-representation. On the other hand, Lord Camden's contention that "natural right" did not justify any author in monopolizing every use and expression of his idea, would be powerfully commended to the delegates to the constitutional convention by the fact that Lord Camden had also contended that "natural right" did not justify the Parliament of Great Britain in taxing, without representation, the Colonies in America.

SEVENTH.—The copyright statutes which had been enacted within five years, by twelve of the States, were all inconsistent with any idea that the framers of the constitution felt authorized to use any language in the Fed-

eral Constitution which would subject any mechanical device, used in an automatic musical instrument, to the dominion of any copyright. For the copyright statutes of Connecticut and Georgia expressly confined copyrights to books, pamphlets, maps and charts. Those of Massachusetts, New Hampshire and Rhode Island expressly confined copyrights to books, treatises and other literary works (except that Rhode Island used the word "productions" in place of the word "works"). Those of New York, New Jersey, Pennsylvania, and Virginia expressly limited copyrights to books and pamphlets. That of North Carolina expressly limited copyrights to books, maps, and charts. That of South Carolina expressly limited copyrights to books. And that of Maryland expressly limited copyrights to books and writings. All these statutes limited copyrights to records of information, and thus excluded from their scope, all instruments to be used in accomplishing physical results. And all automatic musical instruments and instrumentalities are such utilitarian instruments and nothing more.

CHAPTER IV.

DEVELOPMENT OF AUTOMATIC MUSICAL INSTRUMENTS FROM 1787 TO 1908.

Whoever undertakes to contend that the word "writings" in that clause of Section 8 of Article 1 of the Federal Constitution which authorizes Congress to enact copyright laws, is broad enough to cover such sheets of perforated paper as those involved in this litigation, must now admit, or at least cannot any longer deny, that the

word "writings" was not understood by the framers of the Federal Constitution to have a scope broad enough to cover such perforated sheets, or to cover any other controlling part of an automatic musical instrument. For this reason it is necessary for the complainant's counsel to take the ground that the Federal Constitution is *now* to be so interpreted as to fit the new facts of the twentieth century, even in places where no such interpretation would or could have been placed upon its language by those who framed it in 1787. The last chapter of this brief will be devoted to commenting upon this question of constitutional stretching; but this chapter will be devoted to showing that the facts which must be invoked by complainant's counsel to support his contention on this point are not new facts at all.

Indeed, this brief has already shown that those facts, in one form, existed in 1787, and must have been known to many, and perhaps to all, of the framers of the Federal Constitution. That form of those facts related to the automatic organ of the British patent of Justinian Morse, of April 13, 1731, and related also to the automatic organ of Earl Bute of 1762, and to the automatic musical instruments which were elaborately described in the French book published in Paris in 1775.

No argument can be framed in favor of the proposition that such a perforated sheet of paper as that involved in this litigation, constitutes an infringement of a copyright on a musical composition, which would not equally favor the proposition that such a pinned cylinder as that contained in the automatic organ of Earl Bute of 1762, or that described in the French book of 1775, would also infringe such a copyright. The characteristics of the two instrumentalities are so nearly alike, that the facts

which this court is asked to consider in construing the word "writings" in the Federal Constitution are essentially the same facts which were before the framers of that Constitution in 1787.

And even if a substantial distinction could be drawn between the pinned cylinders which were used and well known in automatic musical instruments prior to 1787, and the perforated sheets of paper which are the subject of this litigation, it would still be true that those perforated sheets of paper, though they were not known as early as 1787, have been well known for more than sixty years.

For such a perforated sheet of paper was shown and described as a part of an automatic musical instrument in the British patent No. 11,886, granted to Alexander Bain, October 7, 1847; and that patent showed its perforated paper sheet operating as a valve mechanism, to intermittently admit air to the moving parts of an automatic musical instrument, in substantially the same way that the perforated sheets involved in this litigation likewise operate to intermittently admit air to the moving parts of an automatic musical instrument. And even five years before 1847, a Frenchman named Seytre made a perforated paper sheet, in the form of an endless belt, for operating mechanical musical instruments, and introduced such instruments, with such perforated sheets, into use in France, and probably also into several other countries in Europe, and is believed to have exported some of them to the United States.

Passing over the intermediate development of the application of perforated sheets of paper to automatic musical instruments, as that development is recorded in many patents of several nations, we reach the contribu-

tions of Merritt Gally, of New York City, some of whose patents in this art are No. 203257, of May 7, 1878; No. 210249 of November 26, 1878; No. 214121, of April 8, 1879, and No. 222030, of November 25, 1879. These are elaborate patents, which contain fifty claims on as many inventions in the art of applying perforated sheets to automatic musical instruments. In accordance with some or all of those Gally patents, in connection with other and earlier inventions in that art, automatic musical instruments operated by sheets of perforated paper were numerously introduced into use in this country as early as 1880, and have now been rather common for more than twenty years.

The evidence in these cases was completed in 1904, and therefore does not contain the latest extant information relevant to the development of the business; but it is now well known that during 1907, the sales of mechanical musical instruments operated by perforated sheets of paper reached to about fifty thousand instruments in the United States alone.

And it is also well known and is undeniable that the development of the automatic musical instrument business, during every year of its growth, has operated to much augment the sales of sheet music, to be used with non-automatic instruments; that increase of sales being caused by the excellent and enormous advertising of particular musical compositions which has resulted from millions of automatic performances thereof in automatic musical instruments.

CHAPTER V.

DEVELOPMENT OF COPYRIGHT STATUTES OF THE UNITED STATES FROM 1787 TO 1908.

The practical constructions which Congress has put from time to time upon its own powers to enact copyright statutes is a noteworthy (though not a controlling) consideration to be taken into account when investigating what is the true construction of those powers.

The first evidence of that practical construction is the first copyright statute enacted under the Constitution, which was the statute of May 31, 1790. That statute limited copyrights to books, maps and charts.

The second copyright statute of the United States was the Act of April 29, 1802. That statute added originally invented and designed printed pictures to copyrightable subjects in the United States, and thus followed up the example of Great Britain, as it was presented in the British copyright statute of 1734. That statute had been called for in Great Britain because the British Statute of Anne of 1710 limited copyrights to books; and a similar statute was called for in the United States because the United States statute of 1790 limited copyrights to books, maps and charts.

In extending copyrightability to printed pictures, Congress practically construed the constitutional word "writings" to be broad enough to cover writing by means of pictures, together with writing by means of symbols. And this construction was quite consistent with the fact that pictures and symbols had both been made by mankind throughout historic times to convey information to the mind through the eye. Indeed, picture writing nat-

urally preceded symbolic writing, because a picture of an idea conveys that idea directly, while no system of symbolic writing can be read till after the conventional meaning of its symbols has been learned.

The next enlargement of copyrightability which was enacted by Congress was enacted in the copyright statute of February 3, 1831. That statute extended copyrightability to "musical compositions." But by mentioning that the "musical compositions" which it covered were things printed, and in specifying no possible infringement of any copyrighted "musical composition" except by printing or importing for sale, or publishing, selling, or exposing for sale, a printed or imported musical composition, this statute clearly confined the meaning of the words "musical composition" to printed sheet music. Thus confined, the statute was clearly constitutional, for a musical composition printed on a sheet of paper in musical notation, is as surely a "writing" as is a literary composition printed on the pages of a bound book.

The next enlargement of copyrightability which was made by Congress was made in the copyright statute of August 18, 1856. That statute purported to extend copyrightability to dramatic compositions, as performed in public places. This was the first extension by Congress of statutory copyrightability beyond the limits of constitutional copyrightability. It did not occur till sixty-seven years after the establishment of the national government, and although it occurred fifty-two years ago, no court has ever yet adjudicated the question of its departure from the constitutional limitation of copyrights to "writings."

The next enlargement of copyrightability was made by Congress in the copyright statute of March 3, 1865. That enlargement consisted in including photographs with other originally designed but otherwise printed pictures, among copyrightable things. This statute was hardly necessary, for a photograph is one kind of a printed picture, and was probably copyrightable under the statute of 1802 as truly as any picture printed with ink, and to the same extent.

The next enlargement of copyrightability was attempted by Congress in the copyright statute of July 8, 1870. That statute purported to include paintings and statuary, and other artistic forms, with printed pictures and photographic pictures, among copyrightable things. The question whether in so doing Congress passed beyond the constitutional limitation of copyrights to "writings" yet remains to be adjudicated.

The next enlargement of copyrightability was attempted in the copyright act of June 18, 1874, and it consisted in extending the monopoly of copyrightability to labels designed for application to manufactured articles. But the Supreme Court afterward held that extension to be outside the constitutional limitation of copyright to "writings." Higgins-Keuffel, 140 U. S., 428, 1891.

The copyright Act of March 3, 1891, extended existing copyrightability to foreigners, instead of confining it, as heretofore, to citizens or residents of the United States; but that statute did not extend the scope of copyrightability to any new subject. Inasmuch as that Act was the result of long and elaborate consideration among the people and in Congress, and inasmuch as, in 1891, perforated sheets of paper were extensively made and extensively used in automatic musical instruments, the

omission of Congress to expressly include them in the copyright statute of that year tends to show that Congress then held such perforated sheets to be outside of the constitutional limitation of copyrights to "writings."

The latest enlargement of the scope of copyright to new subjects which has been attempted by Congress is to be found in the copyright Act of January 6, 1897. That Act so amended Section 4966 of the Revised Statutes as to make copyrights cover public performances of musical compositions. That enactment is quite outside the constitutional limitation of copyrights to writings, because it purports to forbid all public singing, whistling or playing of any tune which is represented by any copyrighted printed "musical composition," even when the forbidden singer, whistler or performer of such a tune acquired his only knowledge thereof by hearing it sung, whistled or performed by another person, and never saw, or, seeing, could not read any written or printed sheet music whatever. It was this enactment that was mainly relied upon by the complainant's counsel in these cases in both the courts below, as the foundation of their contention that the sale by the defendant of a sheet of perforated paper, which was adapted to cause an automatic piano to play the musical lullaby called "The Little Cotton Dolly," constituted an infringement of the complainant's copyright on that "musical composition." That contention apparently involved the proposition that the selling of a perforated sheet of paper which was adapted for use only in performing that "musical composition" constituted a contribution to the infringement of the copyright on that musical composition, which would occur whenever that perforated paper would thereafter be used for the public performance of "The Little Cotton Dolly."

Passing over all criticisms of the complainant's doctrine of contributory infringement, it is apparent enough that the enactment on which it was based is plainly unconstitutional. For it is certain that an enactment which forbids all public singing, public whistling or other public performing of any one of large numbers of tunes, even by persons who never saw, or, seeing, never could read any written or any printed musical composition, is an enactment which is quite outside the constitutional limitation of musical monopoly to "writings."

CHAPTER VI.

SUPREME COURT COPYRIGHT CASES RELEVANT TO COPYRIGHT FOUNDATIONS.

The first Supreme Court copyright case which involved any fundamental question in copyright law was WHEATON *v.* PETERS, decided in 1834, and reported in Volume 8 of the Reports of Mr. Peters, beginning on page 591.

The contentions of MR. PAINE on behalf of Mr. Wheaton in that case were reported by Mr. Peters to the extent of many pages, but those contentions contain so many errors in history and of law that for want of space to explain them all, they may all be passed over without particular comment.

The arguments of MR. INGERSOLL and MR. SARGEANT for Mr. Peters were much more accurate, and are still instructive.

MR. DANIEL WEBSTER, in reply, on behalf of Mr. Wheaton, took the ground that the common law of Eng-

land which was brought to Pennsylvania at its settlement in 1682, included a common law copyright, which he said existed in England at that time, and that the Statute of Anne, being of later date, was never in force in Pennsylvania, and therefore did not derogate from that imported common law of copyright.

But this position was not quite consistent with the letter on copyright law, which Daniel Webster had written to Noah Webster in 1826; and the Supreme Court found it to be erroneous at all points, except, its statement that the Statute of Anne was never in force in Pennsylvania.

The opinion of the Supreme Court, in this case of Wheaton *v.* Peters, was delivered by JUSTICE MCLEAN. Its first few pages were devoted to stating and discussing the question whether the author of any literary composition and his assigns, had the sole right of printing and publishing the same by common law. In discussing that question, Justice McLean reviewed the case of Millar *v.* Taylor as reported in 4. Burrow. He also reviewed the case of Donaldson *v.* Beckett as reported in 4. Burrow, without appearing to remember that the true and far more extensive source of information in that case, was its contemporaneous and far more elaborate report in Volume 17 of the Parliamentary History of England. Being apparently guided only by the report in 4. Burrow, Justice McLean said that "Notwithstanding the opinion of the majority of the judges in the great case of Millar *v.* Taylor, was in favor of the common law right before the statute, it is still considered in England as a question by no means free from doubt". If counsel in the case had called the attention of the court, to the report of the case of Donaldson *v.* Beckett, in the Par-

liamentary History of England, Justice McLean would have found that though seven of the eleven judges who advised the House of Lords in that case, expressed the opinion that common law copyright did exist in England before the statute of Anne, those judges were speaking only in an advisory capacity; and he would have also found that their advice was not followed by the House of Lords; for that the House of Lords decided, by a vote of twenty-two to eleven, against the opinions of the seven judges.

Independently, however, of the opinions of the eleven judges, and also of the decision of the House of Lords, Justice McLean, after a short historical consideration of the question, and when speaking of the time of the settlement of Pennsylvania from England in 1682, said that "The literary property of authors, as now asserted, was then unknown in that country" and that "No such right at the common law had been recognized in England, when the colony of Penn was organized".

Justice Thompson delivered an elaborate dissenting opinion; but he had been misled by the incomplete and faulty report of the case of Donaldson *v.* Beckett in 4 Burrow, and appears to have had no knowledge of the full and contemporaneous report of that case in the Parliamentary History of England. Thus he was misled into saying that the decision of the case of Donaldson *v.* Beckett turned entirely upon the construction of the Statute of Anne, whereas if he had read the report of the case in the Parliamentary History, he would have learned that every one of the Lords of Parliament who both spoke and voted in favor of reversing the decree, based their speeches and votes entirely upon what they held to be a total absence of any common law copyright,

either before or after the Statute of Anne, and not upon any theory that there had been a common law copyright, prior to the Statute of Anne, which that statute limited or annulled. And in his own historical review of the development of the idea of copyright, Justice Thompson appears to have lacked access to any adequate library in which such an investigation could be thoroughly conducted, and he certainly lacked any assistance which he could have derived, if living and writing now, from the long and laborious investigations into the history of the idea of copyright, which have been conducted by others, since he wrote his dissenting opinion seventy-four years ago.

When the Supreme Court, speaking through Justice McLean, in Wheaton *v.* Peters, decided that no copyright at the common law had been recognized in England when the colony of Pennsylvania was established in 1682, this tribunal decided a question of fact; for the existence or non-existence of a particular rule of law, at a particular time, in a particular foreign country, is a question of fact and not a question of law. And inasmuch as questions of fact are always open to reconsideration, in new cases, between new parties, where the fundamental facts upon which those questions depend, have been newly investigated and newly laid before the court; this brief, instead of relying entirely upon the decision in Wheaton *v.* Peters, that there was no common law copyright in England prior to 1682, has been made to contain the results of a new investigation of that question of fact. That investigation has also continued its historical inquiry through the one hundred and five years which passed between the establishment of the colony of Pennsylvania, and the formation of the Federal Constitution, with the result of

showing that the majority of the judges of the Supreme Court were right, and Justice Thompson was wrong in 1834, upon the question of the existence or non-existence of common law copyright in England prior to 1682, and with the result of further showing that there *never* was any common law copyright in England.

The Supreme Court, in Wheaton *v.* Peters, having decided the question of fact in the negative, relevant to the existence or non-existence of common law copyright in England prior to the settlement of Pennsylvania, proceeded to decide in the negative the question of law, whether there was in 1834 any common law copyright in the United States as a whole, or in the state of Pennsylvania in particular. On the first of these points the court said that "It is clear there can be no common law of the United States," and on the second of these questions the court held that there was no common law copyright in Pennsylvania.

The cases of STEVENS *v.* CADY (14 Howard 528, 1852) and STEVENS *v.* GLADDING (17 Howard 447, 1854) particularly related to statutory copyright on maps. But in delivering the opinion of the court in Stevens *v.* Gladding, Justice CURTIS said that "There being no common law of copyright in this country; whatever rights are possessed by the proprietor of the copyright, must be derived from some grant thereof, in some act of Congress, either *nominatim* or by satisfactory implication."

In the case of BANKS *v.* MANCHESTER, 128 U. S. 252, 1888, Justice BLATCHFORD in delivering the opinion of the Supreme Court, said that "A copyright cannot be sustained as a right existing at common law, but as it exists in the United States, it depends wholly upon the legislation of Congress".

In the case of CALLAGHAN *v.* MYERS, 128 U. S. 617, 1888, the counsel for the defendant-appellant was James L. High, who was one of the most eminent authors of law books during the last thirty years of the nineteenth century. The printed report of his argument in the case covers eleven pages. One of his paragraphs, beginning on page 639 of 128 U. S. contains a number of errors, into which Mr. High was misled by the faulty report of the case of Donaldson *v.* Beckett in 4 Burrow. One of those errors consisted in saying that "The house of Lords overruled the doctrine of Millar *v.* Taylor; five of the law lords being of the opinion that the Statute of Anne did not deprive the author of his common law right, while six held that the common law right after publication was taken away by the statute; and that the author must look to the statute alone for protection" and that "Upon this slender margin, therefore, the doctrine was established by the House of Lords, that the natural property right of the author, after publication, is wholly lost, and that he must look to the statute alone for protection."

This quoted language shows that Mr. High had been misled by the report of the case of Donaldson *v.* Beckett, in 4 Burrow, into understanding that that case had been decided by a vote of six "law lords" against five. But the historic fact is, that not one of the eleven was a "law lord" nor a "lord" of any kind, and none of the eleven voted or had a right to vote in the case of Donaldson *v.* Beckett, or took part in the decision of that case; except to render advice, with no more potency than advice was rendered by the four counsel who argued the case.

It is true that no lawyer of the eighteenth century would have been likely to have been misled by the report

in 4 Burrow, to the extent that that report misled Mr. High; for he interpreted that report in the light of the constitution of the House of Lords, when sitting in its judicial capacity, as that constitution existed in his day, instead of interpreting it in the light of the constitution of the House of Lords as it existed in the eighteenth century. Mr. High, writing in 1888, evidently had in view the constitution of the House of Lords, when sitting in its judicial capacity, as that constitution was established by the Appellate Jurisdiction Act of 1876, now printed as Chapter LIX of 39-40 Victoria.

That Appellate Jurisdiction Act provided for the appointment by the Queen, of two qualified persons to be "Lords of Appeal in Ordinary", which number was later increased to four, and which persons in order to be qualified, must have been in high judicial office at least two years, or English or Irish barristers, or Scotch advocates at least fifteen years. The Act also provided that those four "Lords of Appeal in Ordinary", when thus appointed, were to be appointed Barons for life, and entitled to sit and vote on all questions in the House of Lords, but that their dignities were not to descend to their heirs.

This Appellate Jurisdiction Act also provided that no appeal shall be heard or determined by the House of Lords, unless there are present at such hearing and determination, not less than three of the persons which were designated in the act as "Lords of Appeal"; which "Lords of Appeal" were to consist of the Lord Chancellor of Great Britain, and the "Lords of Appeal in Ordinary" and such "peers of Parliament" as were holding, or had held, high judicial office.

The Appellate Jurisdiction Act did not disqualify any of the numerous clerical or lay Lords of Parliament of Great Britain, from sitting in the House of Lords, when engaged in judicial or in legislative business. But the Act provided that a quorum of the House of Lords for judicial purposes, might consist of any three of the "Lords of Appeal", including such "peers of Parliament" as had held or were holding high judicial office. Inasmuch as those "peers of Parliament" are generally as many as six or seven in number, the Act provides a force of about a dozen peers, who are highly learned in the law, of which force any three or more are made competent by the Act, to sit as a quorum of the House of Lords for judicial purposes, whether any of the lay or clerical Lords are present or not. Since the passage of this Appellate Jurisdiction Act, the clerical and lay Lords have generally absented themselves from the House of Lords when sitting in its judicial capacity. In fact, only one lay Lord is remembered to have attended on any such occasion during recent times, and though strictly speaking, he had as much jurisdiction to speak and to vote, as any other Lord on the floor, and though he did not attempt to speak, but only to vote, his vote was ignored by the presiding Lord Chancellor.

It was this modern constitution of the House of Lords, when sitting in its judicial capacity, which Mr. High inferred, from the report of the case of Donaldson *v.* Beckett in the 4 Burrow, was the constitution of the House of Lords when that case was decided; though that modern constitution never came into existence until a hundred and two years after that decision.

This particular error, relevant to the case of Donaldson *v.* Beckett, is here traced to Mr. High, rather than to any other of numerous lawyers and authors among us who has been misled into the same mistake; because the fame of Mr. High is so eminent, that it can endure whatever deduction it must, on account of this error, and still leave a loftier reputation than can be expected to follow the lives of most other lawyers and authors who never made any corresponding mistake.

In the case of HOLMES *v.* HURST (174 U. S., 82, 1899), Justice BROWN delivered the opinion of the Supreme Court. The second paragraph of that opinion relates to the laws of England rather than to the laws of the United States. It therefore relates to questions of fact as distinguished from questions of pure law; because questions of the existence and character of particular laws in foreign countries, are really questions of fact, and not questions of pure law like those which relate to the existence or non-existence of particular rules of law in the United States.

While not assuming to review the historical statements relevant to the copyright laws of England, which are contained in the second paragraph of the opinion of Justice Brown in Holmes *v.* Hurst, it seems suitable to mention that he appears to have derived a different impression from that which was derived by Justice McLean in Wheaton *v.* Peters, from his reading of the historical records and reports. It also appears in that paragraph, that counsel did not in that case call the attention of the court to that contemporaneous and authentic report of the case of Donaldson *v.* Beckett, which is contained in the seventeenth volume of the Parliamentary History of England, and indeed, did not furnish the

court with any information relevant to the origin and development of the idea of copyright, or copyright law, prior to 1787, except the comparatively small amounts which can be gathered from the reports in the 4 Burrow, of the cases of Millar *v.* Taylor and Donaldson *v.* Beckett. But whatever historical errors can now be pointed out in the second paragraph of the opinion of Justice Brown in Holmes *v.* Hurst, that paragraph ends with a sentence which states that it seems now to be considered the settled law of England, that the right of an author, to a monopoly of his publication, is measured and determined by the Copyright Act.

CHAPTER VII.

Musical Copyright Laws of Foreign Nations.

The laws of other nations may properly be considered in deciding the present issue in the laws of the United States; because those foreign laws, which prevail most widely, are presumably good; and because, whether they are abstractly good or not, they will cause the American law on the subject to operate differently from what it would, if those foreign laws were different from what they are. In the twentieth century, international relations are so extensive and so intimate that the copyright laws of each great commercial nation, largely affect the practical operation of the copyright laws of each of the other nations, of important commercial rank.

The laws of GREAT BRITAIN have never subjected, to any copyright, any pinned cylinder, or any perforated sheet, or any other instrumentality for governing an automatic music instrument to play a particular tune. And in 1906, the British Parliament, in enacting a new statute relevant to musical copyrights, expressly excluded from its prohibitions, all perforated musical rolls used for playing mechanical instruments, and all records used for the reproduction of sound waves. This act of 1906 is generally known as the T. P. O'Connor Act, and was the result of seven or eight years of public discussion and parliamentary committee consideration in Great Britain.

The copyright laws of FRANCE began with the statute of July 19, 1793, in the year one of the first French Republic. And that statute, enacted by the National Convention, has been in force ever since, as the foundation of the copyright laws of France. The only other French statute relevant to the present subject, is the Act of May 16, 1866, which provides that the manufacture and sale of instruments, serving to reproduce mechanically, the airs of music, do not constitute infringement of any French copyright.

The Court of Appeals of Paris, on January 9, 1895, in the case of Maquet *v.* Thibouville, on an appeal from the Civil Tribunal of the Seine, found that perforated "cartons" for automatically operating pianos, were shown in a number of French patents, beginning with the patent to Seytre of 1842, and decided that such perforated "cartons" do not infringe any musical copyright under any laws of France.

The full French text of this decision comprises more than a thousand words, and includes the statement of fact that the existence and character and use of the said

perforated "cartons" were called to the attention of the Corps Legislatif, of the Empire, when the copyright Act of 1866, was under discussion in that law making assemblage.

The copyright statute of GERMANY, of January 1, 1902, does operate to subject to copyright domination, most perforated sheets of paper, which are adapted to so govern automatic musical instruments as to cause them to perform copyrighted music. That statute has now been six years in operation; and it has been very injurious to most manufacturers of automatic musical instruments in Germany; though it has been a source of great profit to the Choralion Company, which is a rich daughter of the still richer American Aeolian Company, and which likewise providently took contracts from many German music publishers before January 1, 1902, in pursuance of which it has been able, since the enactment of the new German law, on that day, to dominate nearly the whole automatic piano selling business of Germany.

The copyright statute of AUSTRIA, relevant to musical compositions, was enacted in 1895, and its Section 36, provides that the manufacture and use of instruments for the mechanical reproduction of musical works, shall be no infringement of any copyright on music.

No nation other than Great Britain, France, Germany and Austria, is known to have ever enacted any statute, specifically dealing with the question whether a perforated paper music sheet, or its equivalent, is subject to any copyright law of that nation.

But nine nations in 1886, joined in a treaty relevant to copyrights, which contained a section saying that "It is understood that the manufacture and sale of instruments for the mechanical reproduction of musical airs, shall not be considered as constituting an infringement of musical copyright."

That treaty was the celebrated BERNE CONVENTION. The nine nations which signed it, and afterwards ratified it, were Great Britain, France, Germany, Italy, Spain, Belgium, Switzerland, Haiti and Tunis.

One subordinate court in Italy, has repudiated the Berne Convention, on the alleged ground that King Humbert made that treaty without consultation with the Italian Parliament, and on the basis of that repudiation, that court has decided that musical phonographs, do infringe Italian musical copyrights. But an appeal has been taken from that decision to the highest court in Italy, which tribunal is not expected to hold that nation to be morally at liberty to repudiate a treaty, which eight other nations made with the King of that country, in good faith, understanding him to be fully authorized to make it.

How the German Emperor, William II., can reconcile the ratification of the Berne Convention, by the Emperor William I., with the German Musical Copyright Act of 1902, is a question which is too deep to be explored in this brief. Other problems have yielded to analysis, but that one does not yet appear to yield.

Thus it appears that all other nations, which have specifically attended to the subject, first excluded automatic mechanical instrumentalities from the domination of copyright laws; and though Germany in 1902, retracted its agreement to that action, the result of that retraction was to deeply injure her own automatic musical instrument manufacturers, for the benefit of that daughter of the American Aeolian Co. which Germany appears to have adopted in the form of corporate incorporation.

But independent of that German example, it is quite undeniable, that any subjection, in the United States, of perforated paper instrumentalities to the domination of copyrights, would wreck, as by an earthquake, or would starve as by a famine, all American manufacturers of such instrumentalities, which the Aeolian Company would not deign to accept as tributaries to the stupendous monopoly which such a subjection would certainly confer upon that corporation.

CHAPTER VIII.

Musical Plagiarism.

Daniel Webster wrote on October 14, 1826, a letter to Noah Webster in which he said, "Property in the social state must be the creature of law; and it is a question of expediency, high and general, not particular expediency, how far the rights of authors shall be protected". (Life of Noah Webster by Horace E. Scudder.)

This chapter is devoted to developing one of many reasons why "expediency high and general" forbids that copyrights on musical compositions should be extended so far as to cover the manufacture, sale or use of any mechanical instrumentalities, which like sheets of perforated paper, or pinned cylinders, or phonograph cylinders or discs, are adapted to control the performance, by automatic musical instruments, of particular pieces of audible music.

The particular forbidding reason now to be developed, is based upon the fact that the science and the art of music are both so limited in scope, as compared with the science and art of literature, and have already been so far developed in written musical compositions, that comparatively little room is now left for musical *invention*, and many of the musical compositions which are now extant were either *plagiarized* from earlier compositions, or are mere *aggregations* of earlier scattered musical melodies and harmonies. Those musical records of the past, are being so extensively augmented, as year after year is transferred to the past from the future, that the possible field of musical *invention*, which has been diminishing in area a long time already, must always continue to diminish to smaller and smaller dimensions in the future.

Before proceeding to establish, by historical statements, the correctness of this view of the prevalence of musical plagiarism and aggregation, over musical invention and originality, it is hardly necessary to say, that no musician who is a mere plagiarist, or who is a mere aggregator of existing though scattered musical melodies and harmonies, is justly entitled to be rewarded for such doings, by copyrights which would subject, to his domination and to the domination of other musicians like him, the enormous business of making and selling automatic musical instruments in a mighty nation. Nor is it necessary to more than mention the fact, that so few persons have access to the great masses of sheet music which have been printed in Europe, or would be able to read those records of the musical compositions of the past if

they could look upon every one of their pages; that plagiarism of entire musical compositions, and also mere aggregations of old musical melodies and harmonies can be extensively perpetrated without detection. Indeed, it is probable that but few of those plagiarisms, and aggregations, which have already been copyrighted in the United States, or which will hereafter be copyrighted here, will ever be specifically detected and exposed.

George Frederick Handel was born in Germany in 1685, and died in England in 1759, and was buried in Westminster Abbey. He first arrived in London in 1710, and lived most of the last forty-nine years of his life in England, where he composed the oratorio of the Messiah, and much more of the best music now known to mankind.

In 1906, there was printed at the University Press in Cambridge, an elaborate and learned and technical book then lately written by Sedley Taylor, M. A., a distinguished English musician. This book is entitled, "The Indebtedness of Handel to the Works of other Composers; a Presentation of Evidence". This book of Mr. Taylor sets forth conclusive evidence which proves beyond any possibility of denial or doubt, that Handel "lifted" from the written sheet music of twenty-nine of his contemporaries and predecessors, much of the music which he wrote down as his own, and transmitted, in more than twenty different sets of manuscripts, to later times. And Mr. Taylor's book also states that Handel never during his lifetime, or by any papers left to be read after his death, gave any credit to any of those composers for any of the music which he had thus lifted from their pages. And Mr. Taylor also states that no suspicion that any of

that plagiarized matter was not original with Handel, was ever implied in any printed publication, until a quarter of a century after his death, and was never positively stated, till later still.

Early in the nineteenth century, however, the celebrated German violinist, Solomon, who was exceptionally qualified to speak upon the subject, said that Handel went over to England in 1710, when there was a great dearth of good music in that country, and established a great reputation, that was constituted wholly of the spoils of the continent. But this criticism of Handel was much too severe, for although he transcribed much music from the pages of twenty-nine other composers, and put it forth as his own, he also wrote much more, and even better music than any which he lifted from the manuscripts of other men. The universally appreciated "Largo" of Handel, was Handel's own composition, as was also the whole of the oratorio of the "Messiah". Indeed Handel's genius was so preeminent, that Mr. Balfour, while he included in the second edition of his "Essays and Addresses" a paper on Handel, in which he set some of his proved plagiarisms forth, said also, that in copying music from the manuscripts of his contemporaries and predecessors, he did them no injury, but rather made them immortal by lifting their best tunes into permanent fame.

Such being the established facts relevant to how Handel plundered musical Germany for the benefit of musical England; it is difficult and perhaps impossible to rid the mind of a strong suspicion, that many German musicians in later times and with less genius than that of Handel, have sailed still further away from the Fatherland, and even so far as America, and have brought hither and

palmed off on our copyright office, as their own compositions, much that they lifted from the musical records of Germany. Indeed, a competent American musician has lately been heard to say that nearly all the melodies and harmonies of one of the most prolific and well known copyrighters of music in this country, can be traced to earlier musical notations.

Joseph Haydn was born in Austria in 1732, and died in Vienna in 1809. The music of his great oratorio, the "Creation" was written by him, to a German translation of an English libretto which had been compiled from Milton's "Paradise Lost"; and that oratorio was first performed in public in 1799. During Haydn's life he several times visited England, and when there he heard the music of what is now the national anthem, entitled "God Save the King". He liked that music so well, that after he got home to Austria, he plagiarized it, when he undertook to produce and did publish, what has ever since been the Austrian national hymn. Indeed, the music of the Austrian national hymn which was published by Haydn near the end of the eighteenth century, is so nearly like the music of "God Save the King," that good musicians have been heard to say, that the tune originated in Austria, and was appropriated by some Englishman to be sung as the national anthem of England. But historical investigation has disclosed the fact that the words and music of "God Save the King" were sung in England by Henry Carey, a celebrated Engiish song writer of his time, in 1740, who on that occasion claimed to be the author of its music and also of its words. As Haydn was then only eight years old, and as he did not publish the Austrian national hymn until nearly sixty years later, the theory of his priority to Carey cannot be maintained.

It is well known that the music of the Rev. S. F. Smith's national hymn "America" was copied, without any change, from "God Save the King". But that was not, like Haydn's modified appropriation, a plagiarism. It was an avowed and legitimate inheritance of the music of her national anthem, from our mother country.

The "Star Spangled Banner" music was taken from a drinking song which was composed in England by one or the other of two Englishmen, shortly before the American Declaration of Independence. That drinking song was inappropriately entitled, "To Anacreon in Heaven"; because the words of the song had no heavenly or sacred signification.

The music of "Yankee Doodle" was probably "lifted" by some unknown Yankee, from the singing of some English or some Hessian soldier in this country, during the Revolutionary War; and it is believed to have been a piece of country dance music in England, long before that time, and also it is similar to one of the songs of the people of Holland. And Kossuth, when "Yankee Doodle" constituted a part of his musical welcome to this country in 1851, recognized it as nearly identical with some song which he had heard in Hungary in his youth.

The splendid music of the Confederate war song, "My Maryland", was applied to the words of that song, from the singing of another song by a Yale student when visiting in Baltimore in May or June, 1861; he having learned the music in New Haven from hearing it sung by other undergraduates there, to the German student song, "O! Tannenbaum."

The music of "Home Sweet Home" was written down by Henry R. Bishop, an Englishman, to go with John Howard Payne's words; but Bishop lifted that air from among the popular songs of Sicily.

The music of "John Brown's Body", the first war song of the Federal Army during the Civil War, was not an original composition, but was taken from ante-bellum Methodist camp-meetings, in many of which, and particularly in the South, it had already been sung with the devotional hymn entitled, "Say Brothers, Will you Meet Us."

The music of "Dixie", which so fired the Southern heart at the beginning of the Civil War in 1861, was composed on this side of the Atlantic, but it was not composed in the South. It was composed in the City of New York in 1859, and was composed by an otherwise undistinguished white man, to be sung by him as one of the subordinate members of a burnt cork negro minstrel troup on Broadway.

The foregoing instances of musical plagiarism, beginning with Handel, the great musician of the eighteenth century, and continuing through intervening times down to the humble composer whose tune was taken to march with "John Brown's Body", are enough examples to prove that the possible field for the occupancy of original musical compositions has long been comparatively narrow, and must continue to grow narrower still, from period to period.

But lest the present writer be thought to be altogether an iconoclast, it may be proper to mention that some of our favorite musical compositions were really original with those who published them here. And among all of those, from the beginning of musical composition in this country until now, the highest place in the hearts of the people belongs to Stephen Foster's immortal music, "Way Down upon the Suwanee River."

A legitimate argument thus far plainly appears to be deducible from the proved tendency of musical composers to be forced, into musical plagiarisms, by the comparative narrowness of musical possibilities. For those plagiarisms cannot ethically be made reasons for subjecting automatic musical instruments to the domination of copyrights on musical compositions. On the contrary, they prove that such domination would be unjust.

Moreover, quite aside from all question of musical plagiarism, it is well known that there are in the world and in America at present, a considerable number of highly educated "musical joiners" who are so proficient in the known science and art of music, that they can and do produce large numbers of musical aggregations, with wonderful facility, ease and promptness.

For example, one of these highly accomplished musicians was heard to say in June 1906, that he had promised to write and deliver all the music of an entire opera in time for its public performance to begin early in the following September, and that he had as yet written only a few notes of the promised compositions. Sure enough, the promised opera was written in fine shape, and on time, and when it was performed in September, it was promptly pronounced to be decidedly creditable to the distinguished musician who composed it. That gentleman has been writing the music of operas only a few years, but he has already furnished nearly twenty, all of which were much admired by others and very profitable to him. It was of this accomplished musician, that one of his admiring friends was heard to say, "He can turn out those operas of his, one after another, as fast as wanted, with both hands tied behind his back." Such remarkable facility seems to be analogous in music, to

those instances of proficiency in electricity and chemistry, which draw out the admiration of courts in patent cases, but which in those cases, are found by the courts to not constitute invention, and therefore are not proper foundations of monopolies. In like manner, and for similar reasons, there is no escape from the conclusion, that a crucial distinction should be drawn between such musical *invention* as gives *originality* and *long life* to a musical composition, and such prolific musical productivity, as that which many musicians possess, but which does not rise into the realm of genius, nor carry any musical message to the heart or to the soul of mankind.

CHAPTER IX.

CONSTITUTIONAL CONSTRUCTION.

The first three chapters of this brief are devoted to showing what laws and what facts, relevant to copyrights, were within the purview of the thirty-nine framers of the Federal Constitution, when they signed that fundamental law of the United States, on September 17, 1787. Those laws and those facts, prove that those thirty-nine men, did not intend the word "writings," in the copyright clause of that instrument to cover any instrumentality for use in any automatic musical instrument.

Chapters 4, 5, 6, 7 and 8, of this brief are devoted to showing that the laws and facts which have developed, since September 17, 1787, are destitute of any reason for regretting the constitutional limitation of copyrights to "writings," and are likewise destitute of any reason for wishing that it could now be extended to include such instruments and instrumentalities.

This chapter is devoted to showing that any judicial stretching of the constitutional limitation of copyrights to "writings," enough to make that word to include musical instruments and instrumentalities, would constitute judicial permission to Congress to likewise stretch the constitution in any one of many other places, whenever Congress might deliberately, or might rashly, decide to pass laws having such a stretching effect. Some of those possible places for stretching the constitution would be the following:

In Article I, Section 8, paragraph 1, the word, "general welfare" might be stretched enough to cover money appropriations for the discouragement of "race suicide" or for the encouragement of the "strenuous life" in all parts of our common country.

In the second paragraph of the same section, the word "money" might be stretched enough to include anything purchasable with money, such as the corporate stocks of railroad companies; so as to enable the Federal Government to acquire the control of all the railroads in the country, on the credit of the United States, without paying any money therefor.

In the third paragraph of the same section, the words "regulate commerce" might be stretched enough

to include the regulation of the entire conduct of every corporation engaged in commerce with foreign nations, or among the several states, or with the Indian tribes, instead of being limited to such portions of such conduct, as really constitute such commerce.

In the fourth paragraph of the same section, the word, "bankruptcy" might be stretched enough to authorize more comprehensive interferences with the business of corporations than have ever been provided for by any bankrupt statute, or than can be provided for by any statute properly so called.

In the seventh paragraph of the same section, the words "establish post offices and post roads," might be stretched enough to include the management of all railroad trains, or other vehicles, running over post roads.

In the ninth paragraph of the same section, the words "constitute tribunals inferior to the Supreme Court," might be stretched enough to cover the establishment and maintenance of courts of honor, for settling questions of veracity, and courts of arbitration, for establishing rates of wages.

Whenever hereafter a new constitutional convention shall be called by Congress, on the application of the legislatures of two-thirds of the states, that convention may be expected to include half a dozen groups of delegates, each of which will favor one or the other of the six great changes in the Constitution which would result from the six modifications of that instrument which are defined in the last six paragraphs, respectively. But it is improbable that any one of those six changes would be favored by a majority of the delegates. And it is certain, that up to this time, the people of the United States have never consented to any Constitution

which conferred upon Congress any such power as would be conferred thereon if the first, second, third, fourth, seventh and ninth paragraphs of section 8 of Article I of the Constitution were to be respectively stretched, as above defined.

My argument is ended, except to state its conclusion. That conclusion is inevitable. It is as follows:

The framers and ratifiers of the Constitution of the United States, never intended to confer any power upon Congress, to make any law, to subject any automatic musical instrument or instrumentality, to the domination of any monopoly, for the benefit of any author, of any musical writing. And the word "writings" in paragraph 8, of Section 8, of Article I of the Constitution of the United States, cannot be stretched enough to make it confer that power upon Congress; except by an arbitrary departure from the intention of the framers and ratifiers of the Constitution, and from the ancient, and the modern and the universal meaning of the word which they used to define that intention.

ALBERT H. WALKER.

PARK ROW BUILDING,
NEW YORK,
JANUARY 10, 1908.

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Supreme Court of the United States.

OCTOBER TERM, 1907.

Nos. 110 and 111.

WHITE-SMITH MUSIC PUBLISHING CO.,
Complainant-Appellant,

vs.

APOLLO CO.,
Defendant-Appellee.

Brief for Appellant in Opposition to Motion to Dismiss Appeals.

LIVINGSTON GIFFORD,
Of Counsel for Appellant.

C. G. Burgoyne, Walker and Centre Streets, N. Y.

IN THE

Supreme Court of the United States.

OCTOBER TERM, 1907.

WHITE-SMITH MUSIC PUBLISHING COMPANY, Appellant, vs. APOLLO COMPANY, Appellee.	Nos. 110 and 111.

BRIEF FOR APPELLANT OPPOSING APPELLEE'S MOTION TO DISMISS.

Ordinary copyright cases are appealable to the Supreme Court under Section 6 of the Act of March 3, 1891, which created the Circuit Court of Appeals.

Webster vs. Daly, 163 U. S., 159: "By the 6th section appeals "may be taken from the Circuit Court of Appeals to this Court in "all cases in which the judgments and decrees of that Court are not "therein made final where the matter in controversy exceeds $1,000 "besides costs, and copyright cases are such cases."

Press Co. vs. Monroe, 164 U. S., 111: "In all other civil actions "(including those arising under the copyright laws of the United "States) if the matter in controversy exceeds $1,000 besides costs, "there is, as of right, an appeal or writ of error to bring the case to "this Court. Act of March 3, 1891, c. 517, Sec. 6."

But certain copyright cases (*i. e.*, those involving the construction or application of the Constitution or the constitutionality of a law under a contended for construction) may be appealable to the Supreme Court, irrespective of the value of the subject-matter

in controversy, under the following provisions of Sec. 5 of the same act of March 3, 1891 :

" SEC. 5. That appeals or writs of error may be taken from the " district courts or from the existing Circuit Courts direct to the " Supreme Court in the following cases :

* * * * * * * *

" In any case that involves the construction or application of " the Constitution of the United States.

" In any case in which the constitutionality of any law of the " United States, or the validity or construction of any treaty under " its authority is drawn in question."

Appellant urges both the above sections in opposition to the motion to dismiss. In other words, appellant contends :

1. That " the matter in controversy exceeds $1,000 besides costs," as required by Section 6.

2. That the case " involves the construction or application of the Constitution of the United States," as required by Section 5, and also the constitutionality of a law of the United States under the interpretation contended for.

3. Appellant also presents the point that, should the Court feel constrained to grant this motion, it will still retain the case by *certiorari*, and thus decide it on the merits in view of the vast importance to the public at large that the questions involved be settled without delay.

Each of these points will be discussed in its order.

The Issues in These Cases As Shown By the Pleadings and Proofs.

Under the pleadings herein, each of the cases at bar is a regular copyright suit in equity for a discovery of the extent of infringement of the copyright broadly, an accounting of profits and an injunction as to all infringements committed by the defendant of the copyright in suit without limitation as to the character or form of such infringements, or as to whether they may be in the form of perforated music or staff notation, or any other form.

The bill of complaint avers the facts upon which the validity of the copyright depends (Rec., p. 1). The answer expressly " denies all said averments of said bill," and thus puts in issue the validity of the copyright (Rec., p. 289).

The bill avers complainant's title (Rec., p. 2) and the answer broadly denies that " the complainant became, is now, or ever has " been entitled to any exclusive rights in respect to the printing " reprinting, publishing, completing, copying, executing, finishing " and vending, dramatizing or translating of said musical com- " position " (Rec., p. 289).

The bill avers that the " copyrighted musical composition, being " the subject matter of this litigation, is of great value, and that it " exceeds in value the sum of $5,000 " (Rec., p. 2). The answer (Rec., p. 289) does not deny that part of this averment saying that the copyrighted musical composition is " the subject matter of this " litigation ". Its denial is limited to the averred value of the copyrighted musical composition. And upon that issue the averment is overwhelmingly sustained by the proofs (Rec., pp. 4 to 17 and 21 to 33).

The bill avers infringement, generally, without limitation or restriction to any specified form; saying that the defendant did " publish and sell great numbers of copies of said musical compo- " sition, the property of your orator, and for which your orator has " obtained said copyright as aforesaid, and that the defendant still " continues so to do, and that it is threatening to publish and sell " copies of the aforesaid musical composition in large quantities " and to supply the market therewith " (Rec., p. 2). The answer denies this averment in equally unlimited terms. It does not admit the sale of perforated music as distinguished from staff notation or in any way define that issue (Rec., p. 290).

The bill avers that it cannot state the exact amount of profits by the defendant " but believes the same to be the full sum of " $5,000 and so charges the fact to be, and prays that said defend- " ant may full and true disclosures make as to the same and may be " decreed to account therefor in full " (Rec., p. 2). The answer denies this averment and refuses to make the discovery asked (Rec., p. 290).

The bill prays for an injunction against the copying, publishing, selling or offering for sale of " said copyrighted musical composition " or any colorable imitation thereof." It also prays for an account with respect to " the said musical composition as aforesaid " and for other and further relief (Rec., p. 3), without limiting the prayer for injunction or accounting to any particular form of infringement whether perforated or otherwise. The answer denies the right to the prayer for relief in equally unlimited terms (Rec., p. 390).

The suit, therefore, is an ordinary copyright suit putting in issue the validity of the copyright in its entirety, the title thereto, the value thereof, the infringement and the extent and value thereof. There is nothing in either the bill or answer limiting the question of validity or the question of infringement to the perforated form of music.

It is true that in taking the testimony the particular form of infringement put in evidence in each case was a perforated roll (Rec., p. 34–37) but if a decree were entered under the pleadings it would decree the validity of the copyright in general and complainant's title thereto and a discovery and an accounting by the defendant of all its infringements of every form, whether perforated or otherwise, and it would be for the Master on the accounting to report all forms of infringement inclusive of staff notation infringements, if any, as well as perforated infringements (Walker Co. v. Miller, 140 Fed., 249; Wooster v. Thornton, 26 Fed., 276; Hanifen v. Armitage, 117 Fed., 851; Hoe v. Scott, 87 Fed., 221; Ball Co. v. Ball Co., 53 Fed., 246; Walker on Patents, Sec. 742). And the injunction would run against all forms of infringement.

Such being the nature of the case "the matter in controversy" which under section 6 of the Act of March 3, 1891, must "exceed $1,000" is what is referred to in the bill of complaint as "the said copyrighted musical composition, being the subject matter of this litigation" which according to the bill of complaint "exceeds in value the sum of $5,000" (Rec., p. 2) and is not limited as assumed by appellee, to the perforated roll form of said copyrighted musical composition.

The denial, contained in the answer, of complainant's title to the copyright was, in the "Little Cotton Dolly" case, insisted upon by defendant at the hearing in both Courts below and was the subject of a portion of the opinion in the Circuit Court (Rec., p. 473) where this issue was stated as follows:

"The question is whether, in fact, there was such an assignment or transfer of the musical composition before copyrighting as to carry with it the privilege given by the Statute to the composer * * * It is not a strained presumption giving effect to the transaction and the proofs that complainant or its agent Mr. White who afterwards assigned the same to the complainant was vested with the legal title as the proprietor of the composition. It may reasonably be inferred that the composer having placed the composition with the publisher for publication and distribution intended to authorize him to obtain a copyright in his name or in that of the cor-

poration in whose behalf the assignment appears to have been taken (Mifflin v. White, 190 U. S., 263 ; Belford v. Scribner, 144 U. S., 505)."

It will be observed that this question goes not merely to the title to the copyright but also to its validity because the copyright would not be valid unless it was applied for and issued to the person who was entitled to do so as proprietor.

The validity of both copyrights under any construction which would enable them to cover perforated rolls is also a Constitutional question considered in the opinion of the Circuit Court (Rec., p. 474), and argued by Mr. Albert H. Walker in the Circuit Court of Appeals.

Since the denial of the answer put in issue all of those allegations (Rec., p. 1) of fact in the bill prerequisite to the validity of the copyright, complainant proceeded to take proof thereon. The certificate of the Librarian of Congress was put in evidence (Rec., p. 162) as well as the draft to his order, the mailing receipt and the receipt for copies (Rec., p. 160). Also witnesses were examined to show that all the statutory prerequisites were attended to by the proprietor after obtaining title and before publication (see testimony of Bacon, p. 22 ; Davison, pp. 30, 155 ; Buck, p. 37).

Since the answer did not put in issue the allegation that the "copyrighted musical composition" was "the subject matter of this litigation," but did put in issue the allegation that "it exceeds in value the sum of five thousand dollars," complainant proceeded to prove that value and did so not merely by the testimony of the witnesses Bacon, Davison and Maguire (Rec., p. 4 to 17 and 21 to 33), but also by the proof of book entries of sales and royalties (Rec., p. 163, 286–7).

Witnesses Bacon and Davison make affidavits presented herewith reasserting that testimony and continuing the record of sales to the present time and showing that the same valuation and for the same reasons asserted by them at the time the testimony was taken has held good ever since. That valuation was in excess of $1,000 for each copyright.

The Law as to Proof of Jurisdictional Value in Cases for Accounting.

In each of these cases the jurisdictional value is pleaded (R., pp. 2, 18) both from the standpoint of the value of the copyrighted musical composition and also from the standpoint of the amount to be recovered by the accounting.

The value from the latter standpoint is pleaded as follows (Rec., p. 2): "8. That your orator cannot with certainty state the exact "amount of profits by the defendant aforesaid sought to be diverted "to itself, but believes the same to be the full sum of five thousand "dollars and so charges the fact to be, and prays that said defend-"ant may full and true disclosures make as to the same and may "be decreed to account therefor in full."

Appellee's brief refers to this allegation as an "unpositive suggestion" and insufficient under the authority of Washington R. R. vs. District of Columbia, 146 U. S., 227; but the allegation in this case is in the form usual in equity pleading. It positively "charges" the value to be as stated and "prays that said defend-"ant may, full and true disclosures make as to the sum and may "be decreed to account therefor, in full." The allegation in the case cited had no resemblance to this; it said the amount "would reach nearly, if not quite" the sum stated. Moreover, in that case the Court found that the particular taxes attacked did "not approach the jurisdictional sum."

Appellee now undertakes to contradict the value pleaded from this second standpoint by substituting affidavits for an accounting, leaving the pleaded value of the copyrighted composition unquestioned.

We submit that in cases of this nature the Court will not go behind the pleaded value of the profits of which an account is asked, or consider affidavits in contradiction thereof.

Affidavits have been permitted to supply an omission "where the recovery of specific property, real or personal, is sought," but never so far as we know to contradict a pleading; particularly where an accounting was required as to the extent of an infringement or other trespass and the profits therefrom. One of the prerequisites of admitting affidavits has invariably been that the recovery sought was "specific property, real or personal," such as interest, a debt, rent, a vessel or land.

Elgin vs. Marshall, 106 U. S., 580: "Where the recovery of

" *specific property, real or personal,* is sought affidavits of value were " permitted from the beginning as a suitable mode of ascertaining " the fact and bringing it upon the record " (italics ours).

It will be found that all of the cases on admission of affidavits cited in appellee's brief, excepting U. S. vs. Freight Assn., sought the recovery of a specific property. Thus, the recovery of specific interest on bond was sought in Elgin vs. Marshall, 106 U. S., 578. The recovery of specific pieces of real estate was sought in Whiteside vs. Haselton, 110 U. S., 296; Wilson vs. Blair, 110 U. S., 387; Red River Co. vs. Needham, 137 U. S., 632; Rector vs. Lipscomb, 141 U. S., 557; Carr vs. Fife, 156 U. S., 494; Chesapeake Ry. vs. Washington R. R., 199 U. S., 248.

Appellee's brief also cites U. S. vs. Freight Association, 166 U. S., 310, on the subject of affidavits. That case was for an injunction, but the affidavits were not admitted to *contradict* the pleading, but merely to *supply an omission.* The Court said (p. 310): " The bill need not state, in so many words, that a certain amount " exceeding one thousand dollars is in controversy in order that " this court may have jurisdiction on appeal. The statutory " amount must as matter of fact be in controversy, yet that fact " may appear by affidavit after the appeal is taken to this court."

In every case where affidavits have been received they were, we believe, offered by the appellant to supply an omission in the pleading and never by the appellee to contradict the pleading. On the contrary, the following excerpts from Red River Co. vs. Needham, 137 U. S., 634, distinctly imply that affidavits are only admissible to supply an omission and not to raise an issue with the pleading as is attempted in this case:

Red River Co. vs. Needham, 137 U. S., 634: " As stated " by Mr. Chief Justice TANEY, in Richmond v. Milwaukee, 21 " How., 391, in cases in which the value does not, according to " the usual forms of proceeding, appear in the pleadings or evidence " in the record, affidavits have been received to show that the value " is large enough to give jurisdiction to this court; *Course v. Stead* " *et ux.*, 4 Dall. 22; *Williamson v. Kincaid*, 4 Dall. 19."

* * * * * * *

" The result of the cases may be fairly stated to be: (1) Where " the demand is not for money but the nature of the action requires " the value of the thing demanded to be stated in the pleadings, " affidavits will not be received here to vary the value as appearing " upon the face of the record; (2) nor will the filing of such " affidavits be ordinarily permitted where evidence of value has been " adduced below on both sides, and the proofs have been trans-

" mitted either with or without the announcement of a definitive " conclusion deduced therefrom; (3) but where the writ of error is " brought or appeal taken without question as to the value, and the " latter is nowhere disclosed by the record, affidavits may be re- " ceived to establish the jurisdictional amount, and counter " affidavits may be allowed if the existence of such value is denied " in good faith.

" The practice of permitting affidavits to be filed in this court " arose from instances of accidental omission, where the value was " not really in dispute, and it should not be encouraged to the " extent of requiring us to reach a result upon that careful weigh- " ing of conflicting evidence, so frequently involved in determining " issues of fact."

The decisions are uniformly against going behind the pleaded value in cases where the relief sought is an accounting to discover the extent of a trespass and the profit or damage therefrom.

Wilson vs. Daniel, 3 Dall., 401, 407, Chief Justice ELLSWORTH: " It " was not intended to say, that on every such question of jurisdic- " tion, the demand of the plaintiff is alone to be regarded; but that " the value of the thing put in demand furnished the rule. The " nature of the case must certainly guide the judgment of the court; " and whenever the law makes a rule, that rule must be pursued. " Thus, in an action of debt on a bond for £100, the principal and " interest are put in demand, and the plaintiff can recover no more, " though he may lay his damages at £10,000. The form of the " action, therefore, gives in that case the legal rule. *But in an " action of trespass, or assault and battery, where the law prescribes " no limitation as to the amount to be recovered, and the plaintiff " has a right to estimate his damages at any sum, the damage stated " in the declaration is the thing put in demand, and presents the " only criterion, to which from the nature of the action, we can " resort in settling the question of jurisdiction.* (Italics ours.)

" The proposition then is simply this: Where the law gives no " rule, the demand of the plaintiff must furnish one; but where the " law gives the rule, the legal cause of action, and not the plaintiff's " demand must be regarded."

In the same case, Mr. Justice CHASE said (p. 407): " It must be " acknowledged, however, that in actions of tort or trespass, from " the nature of the suits, the damages laid in the declaration, afford " the only practicable test of the value of the controversy."

Lee vs. Lee, 8 Peters, 22: " On the part of the defendant in error

" a preliminary objection has been made to the jurisdiction of this " court, growing out of the act of congress of the 2d of April, 1816 " (Davis's Col. 305), which declares that no cause shall be removed " from the circuit court for the District of Columbia to the supreme " court, by appeal or writ of error, unless the matter in dispute " shall be of the value of $1000 or upwards.

" The matter in dispute in this case is the freedom of the peti- " tioners. The judgment of the court below is against their claims " to freedom; the matter in dispute is, therefore, to the plaintiff " in error, the value of their freedom; and this is not susceptible of " a pecuniary valuation. Had the judgment been in favor of the " petitioners, and the writ of error brought by the party claiming " to be the owner, the value of the slaves as property would have " been the matter in dispute, and affidavits might be admitted to " ascertain such value. *But affidavits, estimating the value of " freedom, are entirely inadmissible, and we entertain no doubt of the " jurisdiction of the court.*" (Italics ours).

Taylor on Jurisdiction and Procedure of the U. S. Supreme Court, pages 189 and 190: " Where judgment is for the defendant, " the amount of plaintiff's claim is the value of the matter in dis- " pute, as a general rule, subject to the qualification that the demand " shall clearly appear to have been made in good faith for such " amount. Gorman v. Havird, 141 U. S., 206, 35 L. Ed., 717, 11 " Sup. Ct. Rep., 943; Magruder v. Ames, " 180 U. S., 496, 45 L. Ed., " 638, 21 Sup. Ct. Rep., 454." * * *

" Affidavits as to the value of the matter in dispute may be filed " in the inferior or supreme appellate court, *when it does not appear " upon the record.* Wilson v. Blair, 119 U. S., 387, 30 L. Ed., " 441, 7 Sup. Ct. Rep., 230; Gibson v. Shufeldt, 122 U. S., 27, " 30 L. Ed., 1083, 7 Sup. Ct. Rep., 1066." (Italics ours).

Wiley rs. Sinkler, 179 U. S., 58. Mr. Justice GRAY, page 64: " This action is brought against election officers to recover damages " for their rejection of the plaintiff's vote for a member of the House " of Representatives of the United States.

* * * * * * *

" The damages are laid at the sum of $2,500. What amount of " damages the plaintiff shall recover in such an action is peculiarly " appropriate for the determination of a jury, and no opinion of the " court upon that subject can justify it in holding that the amount in " controversy was insufficient to support the jurisdiction of the " Circuit Court. Barry v. Edmunds, 116 U. S., 550; Scott v.

" Donald, 165 U. S., 58, 89 ; Vance v. W. A. Vandercook Co., 170
" U. S., 468, 472 ; North American Co. v. Morrison, 178 U. S., 262,
" 267."

Hat-Sweat Co. vs. Porter, 46 Fed., 758, C. C. N. J. (suit under a license to recover royalties for use of a patent, and for an accounting), Judge ACHESON : " It is, indeed, now further urged that the " court is without jurisdiction because of the insufficiency of the " amounts involved. But on the face of each of the bills the amount " in controversy is over the jurisdictional sum. True it is that the " fact has not yet been established by proof. But, no decree for an " account having yet been made, proof of the amounts recoverable " by the plaintiff under the allegations of the bills would have " been premature. We are therefore of the opinion that at the " present stage of the cases this objection is not well taken."

Louisville Co. vs. Smith, 128 Fed., 1, C. C. A., 5th Circuit, was a suit to enjoin interference with an easement or right of way over land and was demurred to. The Court held, page 6: " It must " be remembered too, that this question is before us on demurrer, " and that the value is not liquidated or fixed by law. The alleged " value, therefore, must govern. Texas & Pacific Ry. vs. Kuteman, " 54 Fed., 547, 4 C. C. A. 503. Taking the averments of the bill as " true, as we must do on demurrer, we think it is shown that the " value of the right involved in the suit is sufficient to confer juris- " diction."

Barry vs. Edmunds, 116 U. S., 550 (Action of trespass, alleging $6,000 damages), Mr. Justice MATTHEWS, p. 559 : " This is quite " consistent with what was said in Smith v. Greenhow, 109 U. S., " 669, 671. There the value of the property taken was stated in " the declaration to be $100, while the damages for the alleged " trespass were laid at $6,000, and no circumstances of malice or of " special damage were averred. It was said by the Court : ' We " ' cannot, of course, assume as a matter of law that the amount " ' laid, or a less amount, greater than $500, is not recoverable upon " ' the case stated in the declaration, and cannot, therefore, justify " ' the order remanding the cause on the ground that the matter in " ' dispute does not exceed the sum or value of $500. But if the " ' Circuit Court had found as matter of fact, that the amount of " ' damages stated in the declaration was colorable, and had been " ' laid beyond the amount of a reasonable expectation of recovery, " ' for the purpose of creating a case removable under the act of

" ' Congress, * * * the order remanding it to the State court " ' could have been sustained.' "

Bowman vs. Chicago and Northwestern, 115 U. S., 613, Chief Justice WAITE : " As was said in Hilton v. Dickinson, it is un- " doubtedly true that until it is in some way shown by the record " that the sum demanded is not the matter in dispute, that sum will " govern in all questions of jurisdiction, but it is equally true that, " when it is shown that the sum demanded is not the real matter in " dispute, the sum shown, and not the sum demanded, will prevail."

To force upon the complainant at this stage an accounting by affidavits instead of in the regular way would deprive it of the opportunity not merely to test the truth of the affidavits, but also to follow the infringement throughout all its forms and disguises, whether direct or contributory, and to disclose the surrounding circumstances upon which would depend the assessing of recovery as exemplary or otherwise.

The affidavits of Davison and Bacon submitted herewith refer to their depositions in the record (pp. 4 to 15 and 21 to 31) for a statement of the value of the matter in controversy, in addition to the averments of the bill, and their reasons for such valuation. This having been subject to cross-examination, is, of course, better than any affidavits. Upon the effort here made to substitute affidavits for an accounting their affidavits, submitted herewith, say:

" In addition to maintaining the validity and scope of the re- " spective copyrights in suit and the appellant's title thereto as " alleged in the bill of complaint and in addition to the prayers for " injunction thereunder, one of the objects of these suits was and " is to obtain a decree for an accounting under which I am advised " that the appellee will be compelled to account in the regular " manner, both as to the extent of its infringement in every way, " shape and form, directly and indirectly, and also as to the amount " of recovery to the appellant thereon. When such accounting has " been had, I believe the amount which complainant will thereby " be shown as entitled to recover will exceed $1,000, besides costs " in each of these suits.

" I understand that in its affidavits on motion to dismiss these " appeals, appellant has undertaken to substitute *ex parte* affidavit " statements as to the extent and form of its infringements in lieu " of the accounting prayed for, but I do not believe that the con- " clusions stated in these affidavits in that regard are correct or

" that, in the ascertainment of the true facts, affidavits can be sub-
" stituted for an accounting with justice to the appellant. So far
" as the statements of said affidavits are relevant to the support of
" this motion, I understand them to be fully refuted in my said
" depositions, which being given subject to cross-examination, must
" be more satisfactory to the Court than any repetition thereof in
" the present affidavit.

" In the testimony contained in the transcript of record at pages
" 163 and 164, are given the appellant's sales of the musical com-
" position 'Little Cotton Dolly' under the copyright in one of these
" suits down to June, 1902, and at pages 286, 287 and 288 are given
" the appellant's sales of the musical composition 'Kentucky
" Babe' under the other copyright here in suit down to the same
" date. For the purpose of continuing the statement of these sales
" down to the present time, I have referred to the complainant's
" books and find that from June 4, 1902, until the present time, the
" complainant's sales of the copyrighted musical composition
" 'Little Cotton Dolly' have amounted to more than 11,700 copies,
" and of the copyrighted musical composition, 'Kentucky Babe'
" more than 35,500 copies. Both of these copyrighted musical
" compositions still maintain their popularity and we are not
" experiencing any substantial falling off in the sales of either."

The comment in appellee's brief on the affidavits of Messrs. Davison and Bacon on this motion entirely misconceives the theory upon which those affidavits are presented. They do not purport to discuss the matters pertaining to an accounting to which appellee's affidavits relate. On the contrary, our affidavits refuse to enter into an affidavit discussion of that complicated subject and substantially demur to the right or propriety of appellee's attempt to do so.

If the decree below had been for the complainant and the accounting had already taken place, it might be proper for this Court to go into the matter of the recovery in determining the question of appealable value, but so long as the question as to whether an accounting is to be had is one of the very questions to be determined it is difficult to see how the Court can anticipate the results of that accounting on affidavits.

The ridiculously small value placed by defendants affidavits upon the matter in controversy is sufficient to impeach either their accuracy or their method of computation, because it is entirely irreconcilable with the enormous expense that has been invested in the defense of these suits inclusive of the taking of voluminous

testimony, the employment of expensive counsel and the printing of extensive briefs. It needs no accounting to show that the expenses of this defense must have been from five to ten times the jurisdictional value and when in the face of all of this it is pretended by the defendants affidavits that the matter in controversy is less than ten dollars it simply amounts to *reductio ad absurdum* and shows the necessity of an accounting.

Even aside from matters of accounting, the decisions distinguish between equity cases, where the object sought is to settle matters in dispute between the parties by an injunction, and cases where the object sought is a specific property.

Stinson vs. Dousman, 20 How., 466, was a suit in equity to recover $481. rent under a written contract which provided that the rent should be payable upon failure to perform certain covenants. Mr. Justice CAMPBELL said (p. 466): "The defendant in error objected "that the matter in dispute was not of the value of one thousand "dollars, and therefore this court had no jurisdiction of the cause. "The objection might be well founded, if this was to be regarded "merely as an action at common law. But the equitable as well "as the legal considerations involved in the cause are to be con- "sidered. The effect of the judgment is to adjust the legal and "equitable claims of the parties to the subject of the suit."

McNeill vs. Southern Ry. Co., 202 U. S., 543, was a suit to restrain the State Railway Commission of North Carolina from interfering with complainant's property and the particular interference pleaded was with respect to the loading of certain cars. Mr. Justice WHITE said (p. 558): "It was urged in argument on behalf "of the commission and the ice and coal company that the extra "cost or expense, if any, of placing the four cars of coal on the "siding was the matter in controversy.

"In the court below it would seem to have been claimed that "the one hundred and forty-six dollars demurrage was the question "at issue. However, this may be, as said by the trial court, "although the demurrage dispute may have been the origin of the "litigation, there is involved in the controversy presented by the "bill not only the right to enforce against the railway company the "payment of statutory penalties much in excess of two thousand "dollars, but also the right of that company to carry on interstate "commerce in North Carolina without becoming subject to such "orders and directions of the corporation commission which so di- "rectly burdened such commerce as to amount to a regulation

" thereof. This latter right is alleged in the bill to be of the " necessary jurisdictional value, the averment was supported by " testimony, and the master and the court below have found such " to be the fact. There is no merit in the contention that there is " a want of jurisdiction to entertain the writ of error."

The same distinction between cases where the object sought is the recovery of specific property and those where it includes an injunction to settle matters in dispute between the parties is recognized in the text books.

Taylor on Jurisdiction and Procedure of the U. S. Supreme Court, page 189 : " In a suit for an injunction, not the value of the " plaintiff's damages, but the value of object sought to be gained by " the bill, is ordinarily the value of the matter in dispute. Missis- " sippi & M. R. Co. v. Ward, 2 Black, 485, 17 L. ed., 311 ; Wash- " ington Market Co. v. Hoffman, 101 U. S., 112, 25 L. ed., 782."

Foster's Federal Practice, 1901, p. 1213 : " In a suit for an in- " junction the value of the object sought to be gained by the bill, " not the amount of the plaintiff's damage, is ordinarily the value " of the matter in dispute. Miss. Co. v. Ward, 2 Black 485 ; " Market Co. v. Hoffman, 101 U. S. 112 ; El Paso Co. v. El Paso, " 152 U. S. 157 ; Colvin v. Jacksonville, 158 U. S. 456 ; Elliott v. " Sackett, 108 U. S. 132 ; U. S. vs. Trans-Missouri Association, 166 " U. S. 290."

Hughes Federal Procedure, 1904, p. 200 : " So in a procedure by " injunction the test of jurisdiction is the value of the right to be " protected or the injury to be prevented. Nashville Co. v. Mc- " Connell, 82 Fed. 65 ; Humes v. Ft. Smith, 93 Fed. 857."

In this Class of Cases the Copyrighted Musical Composition is the " matter in controversy " that has to be valued.

Up to the present point we have assumed that the thing to be valued here for the purposes of jurisdiction is the value of the profit according to the second allegation of the bill, but in our opinion the true thing to be valued in this class of cases is the " copyrighted musical composition " in accordance with the first allegation of the bill.

The bill of complaint in each case avers (Rec., pp. 2, 18), " That " the said copyrighted musical composition *being the subject matter*

" *of this litigation*, is of great value, and that it exceeds in value the " sum of five thousand dollars." (Italics ours.)

The answer does not deny that the *copyrighted musical composition* " *is the subject matter of this litigation.*" No denial of that averment has ever been made until its appearance in the brief on this motion to dismiss. On the contrary, the answer, tacitly conceding (by not denying) that the copyright is the subject matter of this litigation, " denies that the value thereof exceeds the sum of five thousand " dollars " (Rec., p. 289).

Upon the only issue thus raised by the answer the facts are substantially conceded in appellee's brief to be with the complainant. Their brief says (p. 14) : " The Bill of Complaint contains (Record, " pp. 2 and 18, clause 6 of Bills of Complaint) averments as to the " value of the entire copyright, and the complainant offered some " proof (Record, pp. 6, 7, Little Cotton Dolly, and pp. 24-28 " Kentucky, Babe Schottische) tending to show this value."

Their affidavits, on the other hand, attempt to raise a new issue not raised by the pleadings, but foreclosed thereby and never raised until now ; namely, that the " copyrighted musical composition " is not " the subject matter of this litigation," but that only a part of it is the subject matter, and that, therefore, only a part of it is to be considered in the valuation.

We do not believe that it is open for appellee, in view of its answer, to raise this new issue at this late day, but assuming that it is open, we maintain that the allegation of the bill is correct and that the matter in controversy is in fact the copyrighted musical composition as an entirety.

The decisions upon this point do not seem to include any brought upon such a thing as a monopoly under a Governmental grant like a copyright, a trademark or a patent. In cases brought for an injunction and an accounting for infringement of a common law trademark, however, the value has been taken as the value of the trademark just as we say here it is the value of the copyright.

Paul on Trademarks, page 510 : " The value of 'the trademark " or right invaded must be stated to be not less than $2,000 if the " action is brought upon a common law trademark in a Untied " States Circuit Court (24 U. S. Stat. 552, March 3, 1887). The " amount in controversy is the value of the trademark, trade name " or the right infringed and not the amount of damage suffered by " the complaint."

Hennessy vs. Hermann, 89 Fed., 669 : " This is a suit for an in-

" junction and an accounting and in such cases the amount in dis-
" pute is the object to be gained by the bill. Jurisdiction does not
" depend upon the amount of damages which complainants will
" be entitled to recover. Foster's Federal Practice, Sec. 16;
" Symonds v. Greene, 28 Fed. 834. The property to be protected
" in this suit is complainant's trademark and this is alleged to be of
" the value of $2000."

Nashville Co. vs. McConnell, 82 Fed., 74: "In the case of a
" trade-mark it is not the label which is protected by injunction
" and which is of substantial value, but it is the business carried
" on under the label which is the true test of value. Nor is the
" mere grant of Letters Patent any more than proper evidence of
" the exclusive right to make and sell the thing protected by the
" letters patent. This exclusive right is the real test of value."

Foster's Federal Practice, p. 51: "In a suit for an injunction,
" the amount in dispute is the value of the object to be gained by
" the bill, not merely the amount of damages already suffered by
" the complainant (Mississippi v. Ward, 2 Black, 485; Market Co.
" v. Hoffman, 101 U. S., 112; Whitman v. Hubbel, 30 Fed., 81).
" Thus, in a suit to enjoin the use of a trade-mark and compel an ac-
" count of profits, the value of the matter in dispute is the value of
" the trade-mark, not the amount of profits which the defendant
" has derived from its use."

Symonds vs. Greene, 28 Fed., 834: "As jurisdiction is not given
" to this Court in this class of cases (trade-mark) except where the
" matter in dispute exceeds the sum or value of $500 there would
" be difficulty in maintaining the jurisdiction if the profits to be re-
" covered were the measure of the orator's rights involved, but that
" is not so understood. An injunction may be of much greater
" value to the orator than any amount he may show himself entitled
" to, and it cannot be said now that such value may not exceed the
" limit required."

Appellee's brief asserts (p. 10): "That the copyright value is
" not the sum or value in controversy merely because the existence
" and the validity of the copyright and the complainant's ownership
" thereof must be averred and established as a foundation for the
" recovery and injunction sought, and that such copyright value
" would not be the sum or value in controversy, even if the exist-
" ence, validity or complainant's title were contested, or even if the
" decree appealed from had found adversely to the existence and
" validity of the copyright or to the complainant's title thereto."

As authority for this position appellee's brief cites no case brought on anything analogous to a copyright. The first case it cites is Elgin vs. Marshal, 106 U. S., 578, and we will use that case as the type of the others cited to explain wherein they differ from the case at bar.

Elgin vs. Marshal was a suit to recover interest on municipal bonds, and the Court held that the principal of the bonds could not be considered, because it was not "the matter which is directly in dispute." Therein the status of the principal of the bonds in that case was the direct opposite of the status of the copyright. In these cases the copyrights are "the matter which is directly in dispute." The thing sued on is the copyright itself; essential allegations of the bill are of those facts upon which the validity of the copyright depends, and these the answer denies. The thing the complainant is obliged to prove title to is the copyright itself. The allegation of infringement is of the copyright itself as a unit; all the prayers for relief are with respect to the copyright itself in its entirety. If the decree be in favor of complainant it will decree the validity of the copyright itself as a unit, and the infringement thereof without discrimination as to form of infringement, and will decree the injunction and accounting in the same way.

None of the above things would be true as to the principal of a bond in a suit for interest, nor as to land rented in a suit for the rent, nor as to the land title in a suit for ore taken, nor as to the land title in a suit for money, nor as to the subject of the tax levy in a suit to save the payment of an individual tax. In all of those cases the thing excluded by the decision from the valuation was excluded for the very reason that it differed from the copyright in these cases in not being "the matter which is directly in issue," but, on the contrary, being a "collateral matter."

If a copyright was like a patent in having a number of claims and the bill specified that the suit was brought for infringement of one claim only, it might perhaps be said that the patent in its entirety was not the matter directly in controversy. But a copyright does not have claims and can only be sued upon in its entirety, and in any suit brought upon it, the copyright itself in its entirety is of necessity the matter directly in controversy.

The copyright in its entirety is certainly the matter directly in controversy in these cases because neither the bill nor answer in any way intimates that, either with respect to validity, title, infringement or remedy, it is to be considered in part and not in whole.

Appellee's brief is certainly wr[illegible]n saying (p. 8) that the validity and title of the copyright were [illegible]t in issue or a matter of dispute. They are both put in issue by the denials of the answers (R., p. 289), and in the Little Cotton Dolly case at least the point was urged strenuously that at the time the copyright was taken the applicant for it had no title (see Circuit Court opinion, R., p. 472).

When the real or ultimate object of a suit is the establishment of a right as against a nuisance, trespass or tort, the value of that right and not the amount of damage has been held to govern.

Thus, in Mississippi Co. vs. Ward, 2 Black., 492, the object of the suit was the establishment of the right to the removal of a bridge across the Mississippi on the ground that it was an obstruction to navigation. This Court held (p. 492): "But the want of a sufficient "amount of damage having been sustained to give the Federal "Courts jurisdiction, will not defeat the remedy, as the removal of "the obstruction is the matter of controversy, and the value of the "object must govern."

Again in McNeill vs. Southern Ry. Co., 202 U. S., 558, the proximate and ultimate objects of the suit were stated and the jurisdictional value determined by the ultimate object: "Although the "demurrage dispute may have been the origin of the litigation, "there is involved in the controversy presented by the bill not "only the right to enforce against the railway company the pay- "ment of statutory penalties much in excess of two thousand dol- "lars, but also the right of that company to carry on interstate "commerce in North Carolina without becoming subject to such "orders and directions of the corporation commission which so "directly burdened such commerce as to amount to a regulation "thereof. This latter right is alleged in the bill to be of the neces- "sary jurisdictional value."

Lanning vs. Osborne, 79 Fed., 661: "The real subject of the "controversy is the asserted right on the part of the Land and "Town Company to establish the rates at which it will furnish "water to the defendants for the purpose of irrigation. * * * "The establishment of that right, denied by the defendants is the "principal object of the bill, and it is the value of that right which "constitutes the amount in controversy."

Butchers Co. vs. Louisville Co., 67 Fed., 40 C. C. A.: "The "amount in controversy in the action is the value of the com- "plainants alleged right to have a siding built and to have live

" stock, in car load lots, received and delivered by the railroad com-
" pany at its stock yards."

Nashville Co. vs. McConnell, 82 Fed., 72: "From what has " been said, it will readily be seen that, in my opinion, these are in " no just sense suits upon the contract, nor for specific performance, " but are suits to protect the business of the complainants against the " irreparable mischief being suffered by reason of the fraudulent " use and abuse of these tickets contracts; and the amount of value " of the matter in controversy is not the damage that might be " specifically recovered in a suit upon any one or more of these con-" tracts but is the protection furnished to the plaintiffs and the loss " prevented by the fraudulent use of any and all of these void " papers. It is the value of the whole object of the suit to the com-" plainant which determines the amount in controversy."

While it is true that as a general rule the collateral effect of the decree cannot be considered, nevertheless the attitude of one of the parties in a litigation may foreclose his availing himself of this rule; and such is the position of the appellee here.

The appellee has introduced a large amount of testimony (Rec., pp. 336, 344, 387, 400) for no other purpose than to show that the real " subject matter in controversy " here is as matter of fact the collateral effect of the decree. Appellee examined witnesses and introduced many exhibits for the very purpose of showing that its view of the real " matter in controversy " was, and is, that it is not merely the two copyrights in issue, but that the effect of a decree in favor of the complainant, in view of existing contracts contingent thereon, will be to stop appellee's business. The introduction of this matter into the case was the doings of the appellee, and appellant had nothing to do with it, and therefore the appellee cannot now deny that this is to be considered in determining the value of the actual matter in controvery.

The Constitutional Question.

We now turn to the second reason why these appeals should not be dismissed; namely, because they are maintainable under Section 5 of the Act of March 3, 1891 (quoted *supra*, p. 2), irrespective of the amount involved.

A case in the Supreme Court is brought within section 5 if the constitutional provision involved was construed by the Circuit

Court or was applied by the Circuit Court to the case in that court. The Circuit Court in deciding these cases did construe that part of the Constitution which provides that Congress shall have power to promote the progress of science and the useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries. That construction consisted in holding that the word "writings" as employed in the Constitution includes all forms of writing, printing, engraving, etching, etc., by which the ideas in the mind of the author are given visible expression but does not include perforated music. The language of the Circuit Court is as follows (Rec., p. 473) :

"But it is vigorously insisted that the proofs show that the perforated music sheet is in fact a record of the musical composition. Many witnesses of musical distinction have testified that the perforations are a form of notations without bars or measurements, and hence not only correspond with the tones of the musical composition but that a perforated music roll or sheet is actually a record thereof. Opposed to this contention is the suggestion that under the Constitutional power of Congress to 'promote the progress of science and useful arts by securing for limited times to authors and inventors, the exclusive right to their respective writings and discoveries,' a copyrightable musical composition must be a writing and not, as already intimated, a mental conception not reduced to material form. The meaning of the word 'writings,' as employed in the Constitution, has been expressly defined in Lithographic Co. v. Sarony, 111 U. S., 54, to include 'all forms of writing, printing, engraving, etching, etc., by which the ideas in the mind of the author are given visible expression.' The restricted definition of the word 'writings' does not, it is thought, permit the inclusion in Section 4952 of the Revised Statutes of a musical conception of the inclusion of collateral musical sounds or expressions of a musical composition."

It is true that it may be possible to decide these cases in favor of the defendant without adverting to the constitutional question. It was so decided by the Circuit Court of Appeals by holding that on the face of the statute without looking further (Rec., p. 490) "a perforated paper roll, such as is manufactured by defendant, is not a copy of complainant's staff notation." But, on the other hand, it is true that the decision cannot be rendered in favor of the complainant without involving, not merely the statutory question, but the constitutional question, and, therefore, the case must be treated as one involving both of these questions.

Holder vs. Altman, 169 U. S., 88: "Upon such a writ of error, "differing in these respects from a writ of error to the highest "Court of a State, the jurisdiction of this Court does not depend "upon the question whether the right claimed under the Constitu- "tion of the United States has been upheld or denied in the Court "below; and the jurisdiction of this Court is not limited to the "constitutional question, but includes the whole case (Whitten v. "Tomlinson, 160 U. S., 231, 238; Penn. Ins. Co. v. Austin, 168 "U. S., 685). But this Court has not found it necessary to pass "upon the constitutional question, because it is of the opinion "that the contract is not within the statute set up by the de- "fendant."

Since the power of Congress to enact any copyright law must be found in the Constitution, it is obvious that neither the present Copyright Law nor any that Congress may hereafter enact can cover perforated music unless the manufacture and sale of perforated music is in derogation of the "exclusive right to their respective writings" which Congress is empowered to confer on authors.

This constitutional question has been raised and discussed not only by the Circuit Court in these cases. It was the subject of an argument by Mr. Albert H. Walker, of New York, in the Circuit Court of Appeals, which was submitted to the Court both orally and in print. This constitutional question has also, during the session of the last Congress, been the subject of most elaborate and extensive arguments in behalf of all classes of business interested, before the Congressional Committee having under consideration the proposed amendments to the Copyright Law.

It seems inevitable, therefore, that this constitutional question must come to the attention of and be considered by the Supreme Court in deciding these cases on the merits.

It may be contended that the right to have these appeals held under section 5 of the Act of 1891 has been waived by taking the intermediate appeal to the Circuit Court of Appeals instead of coming direct from the Circuit Court to the Supreme Court as permitted by section 5. If such contention is made, we say that there is no such waiver under the following decisions:

In Northern Pacific Railroad Co. vs. Amato, 144 U. S., 465, the railroad had been sued by an employee for personal injuries and had obtained a verdict in the Circuit Court. On defendant's writ of error, the Circuit Court of Appeals had affirmed the judgment and a writ of error was taken to the Supreme Court. A notice to

dismiss defendant's writ of error was made in the Supreme Court. The Court held (p. 473):

"Nor can it be objected, as a ground for this motion, that the defendant has waived its right to a review by this Court because it failed to take a writ of error from this Court to the Circuit Court, to review the judgment of the latter Court."

Scott vs. Donald, 165 U. S., 71: "It is also argued that the amounts involved in the respective suits were not sufficient to give jurisdiction to the Circuit Court although the question of jurisdiction of the Court below has not been certified to us in the manner provided by the 5th section of the judicial act of March 3, 1891. Yet as the case is before us, in a case in which the law of a State is claimed to be in contravention of the Constitution of the United States under another clause of that statute we have jurisdiction of the entire case and of all questions involved in it. Horner v. United States, 143 U. S., 570; Carey v. Railway, 150 U. S., 181; Chappell v. United States, 160 U. S. 499."

As to Certiorari.

In view of the vast importance of the questions involved in these cases, it is safe to assume that the Supreme Court will, of its own motion, retain them for decision on the merits by *certiorari* even if the motion to dismiss the appeals should prevail.

In Lau Ow Bew vs. United States, 144 U. S., 58, it was held that a case lacking the money value condition of appealability is reviewable upon *certiorari:*

"It did not fall within either of the classes of cases which may be brought directly to this court under the act, and was, therefore, properly carried to the Circuit Court of Appeals. And as a case of *habeas corpus* is not one in which the matter in controversy involves a money value, no appeal lies from that court under section six. Kurtz v. Moffitt, 115 U. S., 487. But as the decree is "made final" by the effect of the section in giving the Circuit Court of Appeals jurisdiction over that class of cases, we are of opinion that it is reviewable upon *certiorari*, and that this writ was providently issued.

"In every case within its appellate jurisdiction the Circuit Court of Appeals may certify to this Court any questions or propositions of law in respect of which it desires instruction, and this court may then require the whole record and cause to be sent up; and so it is competent for this court by *certiorari* to direct any case to be certified, whether its advice is requested or not, except those which may be brought here by appeal or writ of error, and the latter are specified as those where the money value exceeds a certain amount, and which have not been made final "in this section," that is, made

final in terms. And as *certiorari* will only be issued where questions of gravity and importance are involved, or in the interest of uniformity of decision, the object of the act is thereby attained."

The right of this Court to take up these cases by *certiorari* is not barred by delay. The decree of the Circuit Court of Appeals was dated June 5, 1906, and filed June 11, 1906. But in The Conqueror, 166 U. S., 114, it held that the act does not fix the time within which application for *certiorari* must be made; that it "should be made with reasonable promptness," which would be complied with at any time within a year. We do not understand that case to hold that reasonable promptness may not exist under certain circumstances where more than a year has elapsed, and we believe that the reasons in this case for saying the delay was no fault of the complainant are fully as good as they were in that case for saying that "no fault is imputable to the Government in not making the application before."

The Conqueror, 166 U. S., 114: "The act does not fix the time within which application for a *certiorari* must be made. As the decree was entered June 6, immediately after this court had adjourned for the term, and as the application must be made to the court while in session, no fault is imputable to the Government in not making the application before the opening of the next term in October; and while we think such application should be made with reasonable promptness, as it was made during the term and within a year after the original decree, we think it was within the time. We do not think the party complaining is limited to the six months allowed by section eleven of the Court of Appeals act for suing out a writ of error from the Court of Appeals to review the judgment of the District or Circuit Court; and it would seem that he is, by analogy, entitled to the year within which, by section six, an appeal shall be taken or writ of error sued out from this court to review judgments or decrees of the Court of Appeals in cases where the losing party is entitled to such review."

It is appellee's fault that more than a year has elapsed. The appeal was taken September 4, 1906, so as to be on the October Term of 1906. If appellee had been diligent it should have made this motion to dismiss last year in which event if the motion had prevailed, this court would have taken the case by *certiorari* well within the year. Certainly, such a course cannot be defeated by appellee through its own delay without fault of the complainant or the Court.

It needs no argument to show that these cases involve, in the highest degree, such "questions of gravity and importance" as it was the very object of the Act to enable this Court to take up by *certiorari*. The following language of the opinion of the Circuit Court of Appeals is sufficient upon that point (Rec., p. 489): "The questions raised in these cases are of vast importance and involve far "reaching results. * * * We are of the opinion that the rights "sought to be protected by these suits belong to the same class as "those covered by the specific provisions of the copyright statutes "and that the reasons which led to the passage of said statutes applied with great force to the protection of rights of copyright "against such an appropriation of the fruits of an author's conception as results from the acts of defendant, but in view of the "fact that the law of copyright is a creature of statute and is not "declaratory of the common law and that it confers distinct and "limited rights which did not exist at the common law, we are constrained to hold that it must be strictly construed and that we are "not at liberty to extend its provisions either by resort to equitable considerations or to a strained interpretation of the terms of "the statute."

Conclusion.

It is respectfully submitted that the motions to dismiss these appeals should be denied.

LIVINGSTON GIFFORD,
Of Counsel for Appellant.

Supreme Court, U. S.
FILED
OCT 21 1907
JAMES H. McKENNEY,

United States Supreme Court.

OCTOBER TERM, 1907.

Nos. 770 and 771.

WHITE-SMITH MUSIC PUBLISHING CO.,
Appellant.

vs.

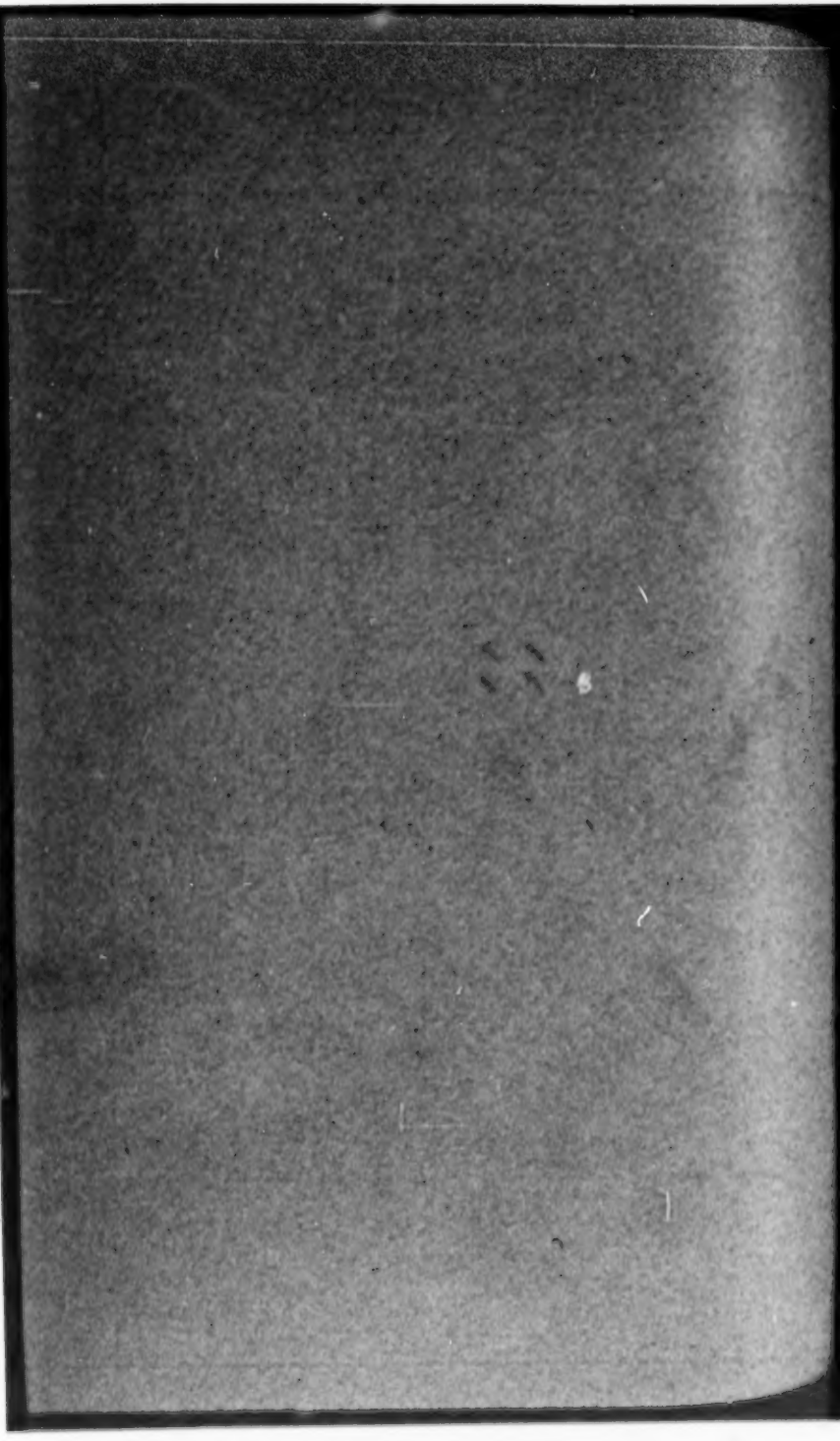
APOLLO COMPANY,
Appellee.

Appellant's Affidavits in Opposition to Motion to Dismiss.

GIFFORD & BULL,
Solicitors for Appellant.

LIVINGSTON GIFFORD,
Of Counsel.

C. G. Burgoyne, Walker and Centre Streets, N. Y.



IN THE

Supreme Court of the United States,

OCTOBER TERM, 1907.

WHITE-SMITH MUSIC PUBLISHING CO., Appellant, vs. APOLLO COMPANY, Appellee.	Nos. 110 and 111.

STATE OF MASSACHUSETTS } ss.
County of Suffolk }

BANKS M. DAVISON, being duly sworn deposes and says as follows:

I am of mature age and reside in Boston, Mass., being Manager of Publications of the appellant herein and being the same Banks M. Davison whose depositions appear in the transcript of record herein.

I have now re-read said depositions and re-affirm them.

The matter in controversy in each of the above entitled suits was at the time of said depositions and has continued ever since to be and is now in excess of $1000 and even in excess of $5000. The reasons that I gave for this assertion at the time of said depositions have continued true ever since and are true today and I refer to said depositions for such reasons. In addition to maintaining the validity and scope of the respective copyrights in suit

entitled suits was at the time of said depositions and has continued ever since to be and is now in excess of $1000 and even in excess of $5000. The reasons that I gave for this assertion at the time of said depositions have continued true ever since and are true today and I refer to said depositions for such reasons. In addition to maintaining the validity and scope of the respective copyrights in suit and the appellant's title thereto as alleged in the bills of complaint and in addition to the prayers for injunction thereunder, one of the objects of each of these suits was and is to obtain a decree for an accounting under which I am advised that the appellee will be compelled to account in the regular manner both as to the extent of its infringement in every way, shape and form, directly and indirectly, and also as to the amount of recovery to the appellant thereon. When such accounting has been had, I believe that the amount which complainant will thereby be shown as entitled to recover will exceed $1000 besides costs in each of these suits.

I understand that in its affidavits on the motion to dismiss these appeals, appellee has undertaken to substitute *ex parte* affidavit statements as to the extent and form of its infringements in lieu of the accounting prayed for, but I do not believe that the conclusions stated in these affidavits in that regard are correct or that in the ascertainment of the true facts affidavits can be substituted for an accounting with justice to the appellant.

The affiants of appellee's affidavits in support of this motion all come from persons highly interested in defeating these suits. The three companies, Q. R. S. Co., Melville Clarke Piano Co. and Apollo Co. are, collectively, the real defendant in substance in this case; the infringements having passed through their hands as maker, seller and reseller. The affiants coming from these companies are E. G. Clark, A. M. Page, A. L. Janson and F. Kanu.

The Perforated Music Roll Co. from whom come

appellee's affiants W. F. Wallace and G. H. Davis, was, while it existed, a persistent infringer of patents as well as copyrights affecting musical compositions but was not a commercial success and is now understood to be defunct. The W. W. Kimball Co. from which comes the remaining affiant, E. B. Bartlett, is another persistent infringer.

So far as the statements of said affidavits are relevant to support this motion, I understand them to be fully refuted in my said depositions to which I refer.

WALTER M. BACON.

Subscribed and sworn to before me this ninth day of October, 1907.

WALTER A. STONE,
Notary Public.

[SEAL.]

Oct 14

Office Supreme Court, U. S.
FILED
OCT 14 1907
JAMES H. McKENNEY
Clerk

IN THE

Supreme Court of the United States.

OCTOBER TERM, 1907.

Nos. 110 and 111.

WHITE-SMITH MUSIC PUBLISHING COMPANY,

Appellant.

against

THE APOLLO COMPANY,

Appellee.

PETITION OF VICTOR HERBERT FOR LEAVE TO BE ADMITTED AS CO-APPELLANT AND TO BE HEARD AND FILE A BRIEF.

NATHAN BURKAN,
Solicitor and Counsel
For Victor Herbert, Petitioner,
Office and Postoffice Address,
99 Nassau Street,
Borough of Manhattan,
City of New York.

Supreme Court of the United States,

OCTOBER TERM, 1907.

WHITE-SMITH MUSIC PUBLISHING COMPANY,
Appellant,

against

THE APOLLO COMPANY,
Appellee.

Appeal from United States Circuit Court of Appeals, Second District, Nos. 110 and 111.

Petition of Victor Herbert to be admitted as a co-appellant and for leave to be heard and submit a brief.

TO THE HONORABLE, THE SUPREME COURT OF THE UNITED STATES:

Your petitioner respectfully shows:

First: That your petitioner is a citizen of the United States and resides at No. 321 West 108th street, in the Borough of Manhattan, City of New York.

Second: That your petitioner is a composer of music and is the author and composer of a number

of copyrighted operas and other copyrighted musical compositions, and that your petitioner's works have become favorably known to the public and your petitioner has acquired a reputation as composer of good music. That your petitioner relies for his income upon the compensation which he may obtain for granting to others the right to use his works.

Third: That during the last ten years your petitioner has suffered great loss and injury by reason of the unauthorized use made of your petitioner's copyrighted compositions by the defendant herein and by other persons and corporations engaged in the manufacture and sale of perforated music rolls and of other devices adapted to the automatic reproduction of music. That the defendant and said other persons and corporations have appropriated your petitioner's compositions, embodied them in music rolls and records and sold large quantities of such reproductions of your petitioner's copyrighted compositions in very large quantities, all without the consent of and compensation to your petitioner.

That in the catalogues circulated by the defendant more than seventy-five copyrighted compositions of your petitioner have been and are being offered for sale, including the following:

3405 American Girl.
2861 Babes in Toyland.
"The Health-food Man."
2990 Babes in Toyland.
"I Can't do the Sum."
2860 Babes in Toyland.
"The Men."

2874 Babes in Toyland—Selection.
x2115 "Babette"—Selection.
2958 Babette.
"To the sound of the pipe and the roll of the drum."
2862 Babes in Toyland.
"Toyland."
2859 Babes in Toyland.
"With Downcast Eye."
2955 Babette.
"I'll bribe the Stars."
2956 Babette.
"There once was an Owl."
2957 Babette.
"Where the fairest flow'rs are blooming."
1476 Badinage.
x1187 Fluerette.
2384 Fortune Teller—Gipsy Love Song.
2383 Fortune Teller—Love is Tyrant.
3256 Fortune Teller—March.
2403 Fortune Teller—Selections.
2506 Fortune Teller—The Serenade of All Nations.
3355 Fortune Teller—Waltzes.
x1067 Ghazel—No. 1.
Yesterthoughts, No. 3.
x1101 La Coquette, No. 2.
3590 March (from "The Ameer.")
3352 March (from "The Viceroy.")
x1088 The Mountain Brook, No. 4.
3668 Ocean Breezes Waltz.
x1021 On the Promenade.
1979 Panamericana.
x1011 Punchinello.
4385 Serenade—Cupid and I.
2467 Serenade—I Adore Thee.
3720 Serenade March, The
2892 "The Serenade"—Selections.

3718 Serenade Waltzes, The
3301 Singing Girl, The—March.
2393 Singing Girl, The—Selections.
2764 The Singing Girl.
The Song of the Danube.
3302 Singing Girl, The—Waltzes.
x1211 Under the Elms.
2404 Viceroy, The—I am the Leader of Society.
2669 Viceroy, The—Just for Today.
3352 Viceroy March.
2401 Viceroy Selections.
2413 Viceroy, The—So They Say.
2663 Wizard of the Nile—Star Light, Star Bright.
2529 Wizard of the Nile.
Duet—What is Love?
Stonecutter's Song.
Song and Chorus—To the Pyramids.
2235 Wizard of the Nile.
Oriental March.
Song—I've Appeared Before the Crowned Heads.
Song—I Have Been a Maying.
x2168 It Happened In Nordland—Selection.
x2305 Miss Dolly Dollars.
I. Opening Chorus.
II. Life's a Masquerade.
III. A Woman is Only a Woman.
IV. An Educated Fool.
V. Dolly Dollars.
VI. American Music.
VII. Finale II.
x2293 It Happened in Nordland.
Any Old Tree.
x2308 It Happened in Nordland.
Absinthe Frappe.
x3273 Mazurka.
From "The Singing Girl."
x3312 "Al Fresco"—Intermezzo.

x3420 Bandana Land—Two Step.
From "It Happened in Nordland."

x3373 Miss Dolly Dollars—Waltzes.

x2350 M'lle Modiste.
Opening Chorus, "The Time and the Place and the Girl," "If I Were on the Stage," "Love Me, Love my Dog," "Hats Make the Woman," "Ze English Language," "The Mascot of the Troop," "The Keokuk Culture Club," "The Nightingale and the Star."

x2406 Mlle. Modiste—If I Were on the Stage.
(Kiss Me Again.)

x2341 Red Mill, The—Selection.
Intro.:—"Opening Chorus Act II," Whistle It," "You Can Never Tell About a Woman," "The Streets of New York," "I'm Always Doing Something I Don't Want to Do," "A Widow Has Ways."

x3340 Wizard of the Nile, The
Starlight Waltz.

x2335 Wonderland.
Intro.:—"The Nature Class," "When Perrico Plays," "Jografree," "The Ossified Man," Finale Act I, Entr' Acte II, Opening Chorus Act II, "The Only One," "Popular Pauline," "The Voice For It," "I Myself and Me."

20075 Babette—Selection.

11199 1 Ghazel.
2 Yesterthoughts.

30071 Miss Dolly Dollars—Waltzes.

20079 M'lle. Modiste—Selection.

11465 La Coquette.

20058 It Happened in Nordland.
Selection.

30037 The Singing Girl—March.

x2634 M'lle Modite, "The Nightingale and the Star."

x2635 The Red Mill, "In the Isle of Dreams."

x2638 M'lle. Modiste, "Love Me, Love My Dog."

x3555 It Happened in Nordland—Waltzes.

x3581 M'lle Modiste—Waltzes.

x3582 Red Mill—Lancers.

x2644 The Dream City—Selection.

Intro:—"Bound for the Opera," "Love by the Telephone," "In Vaudeville," "A Farmer's Life," "Nancy I Fancy You," "Hannah."

x2645 "Love by the Telephone."

x2646 "A Farmer's Life."

x2647 "Hannah."

x2648 M'lle Modiste.

"I Want What I Want When I Want It."

x2653 The Tattooed Man—Selection.

Intro.:—"Hear My Song of Love," "Boys Will Be Boys and Girls Will Be Girls," "Legend of the Djin," "Opening Chorus Act. II," "The Land of Dreams," "Omar Khayyam," "Take Things Easy."

x2654 "Boys Will Be Boys and Girls Will Be Girls."

x2655 "Legend of the Djin."

x2656 "The Land of Dreams."

x2657 "Omar Khayyam."

x2670 The Tattooed Man—Selection.

Intro.:—"The Floral Wedding," "Things We are Not Supposed to Know," "Nobody Loves Me," "There's Just One Girl I'd Like to Marry," "Watch the Professor," "The Never, Never Land."

x2671 The Tattooed Man.

"The Floral Wedding."

x2672 The Tattooed Man.
"Things We Are Not Supposed to Know."

x2673 The Tattooed Man.
"Nobody Loves Me."

x2574 The Tattooed Man.
"There's Just One Girl I'd Like to Marry."

x2675 The Tattooed Man.
"Watch the Professor."

x2676 The Tattoed Man.
"The Never, Never Land."

6156 American Fantasie.
Intro.: "Hail Columbia," "Happy Land," "Swanee River," "Dixie," "Columbia, the Gem of the Ocean," "The Star Spangled Banner."

That your petitioner has been informed and verily believes that large numbers of reproductions of your petitioner's said compositions have been sold by the defendant.

Fourth: That the decision of this case by this Court involving the determination of the question as to whether the copyright in a musical composition is infringed by the reproduction and sale of such composition in the form of perforated rolls or records for automatic instruments will as much affect the rights of your petitioner as it will those of the plaintiff. If the defendant's course in using as it did the compositions of the plaintiff in error is sanctioned, then its course in appropriating your petitioner's works will be taken to be lawful and the right to protection against that course, which your petitioner believes he has, will in effect be barred.

Fifth: That a decision of this Court holding that a musical composition is not infringed by the reproduction and sale of such composition in the form of perforated rolls and records for automatic instruments, will most seriously affect the interests of the American composers, including your petitioner, in that it will nullify in a large measure the protective value of musical copyright.

That the situation confronting the American composers has been revolutionized by the introduction and rapid development of automatic musical instruments and of rolls and records for the same. These instruments and rolls and records were not of much practical importance until about twelve years ago, but since then their manufacture and sale have increased at an extraordinary rate.

In 1900 an annual production of 6382 piano players, piano playing attachments and self-playing pianos was reported by the Census. (12th Census, Manufactures, Vol. IV, page 451.)

In 1905 the annual production of the same instruments had increased to 22,502. (Bulletin 82, Census of Manufactures, 1905, page 16.)

In 1900 there were produced 151,403 phonographs, graphaphones and gramaphones. (12th Census, Manufactures, Vol. IV, p. 182.)

In 1905 the production of these machines was more than twice as much in value as in 1900. (Bulletin 82, page 32.)

For use with these instruments many millions of perforated rolls and records, each being the reproduction of a musical composition, have been manufactured during the short period of time above indicated.

In 1900 there were manufactured for phonographs, graphophones and gramophones 2,763,277 records having a value of $539,370, and in 1905, the annual production of these records had increased

to a value of $4,678,547, being nearly eight times that of 1900 and indicating a much larger increase in number. (12th Census, Manufactures, Vol. IV., page 182; Bulletin 32, page 32).

As to the number of perforated rolls used in connection with piano players, piano playing attachments, self-playing pianos and organs, there is evidence in the record of this case showing that during the year 1902 from one million to one and a half million rolls were made in the United States. (Testimony of James H. White, Record, page 61). And the witness Francis L. Young, the manager of the music department of the Aeolian Company, testifies that the Aeolian Company has sold between five and ten million music rolls and had published in the form of such rolls 10,000 different musical compositions. (Testimony of Francis L. Young, Record, pp. 147, 148).

That your petitioner has been informed and verily believe that the number of reproductions of musical compositions sold in the said forms of perforated rolls and records now equal the number of copies of the same sold in the form of sheet music and music books, while ten years ago the number of the former was insignificant.

That the said rolls and records are already supplying a large part of the demand that would otherwise have found satisfaction by resorting to sheet music. And the facts and development above shown clearly tend to give to the said rolls and records an increasing preponderance over sheet music and to finally make the former the more generally used method of reproducing music and to reduce sheet music to relative insignificance.

If these new forms of reproducing music be held to be exempt from the operation of the copyright laws, then the composers will be without protec-

tion as against the most extensive and profitable use of their compositions, and musical copyright failing to secure to the composers the exclusive right in their works, will cease to promote the musical art.

Sixth: That the question of the application of the copyright laws to perforated music rolls and similar reproductions of musical compositions is an issue to which the composers are more direct parties than the music publishers, and your petitioner believes that the said question will be more adequately argued, if your petitioner is permitted to be heard on this appeal and to submit a brief to the Court.

Wherefore, your petitioner prays that he be admitted as a co-appellant and that he be heard upon the hearing of this appeal and that he be permitted to submit his brief, and that he have such other relief as to the Court may seem proper.

VICTOR HERBERT,
Petitioner.

NATHAN BURKAN,
Solicitor and Counsel for the Petitioner.

State of New York,
City and County of New York, } ss.:

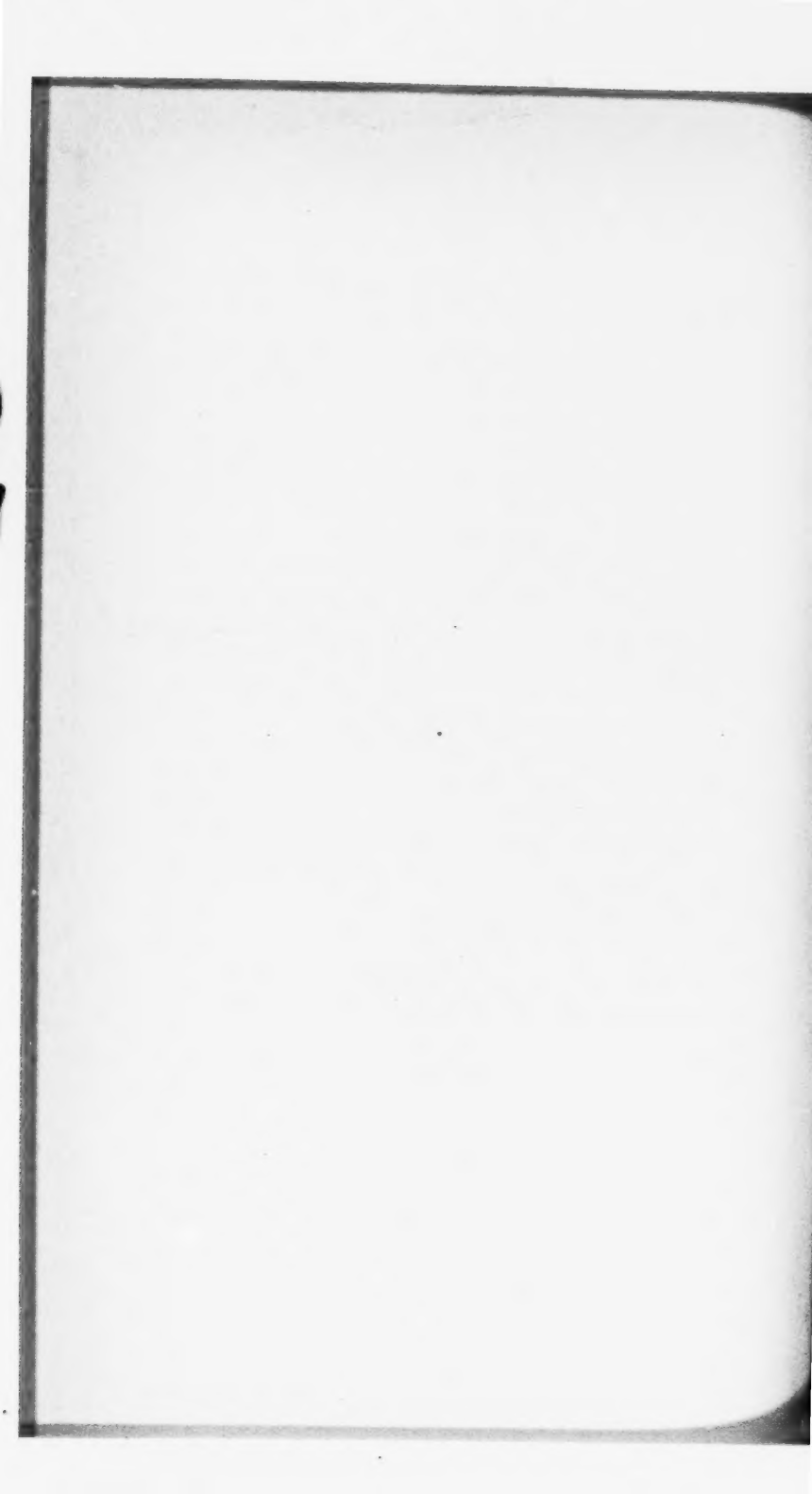
Victor Herbert, being duly sworn, deposes and says that he is the petitioner above named; that he has read the foregoing petition and knows the contents thereof; that the same is true of his own knowledge except as to the matters therein stated to be alleged on information and belief and as to those matters he believes it to be true.

Subscribed and sworn to before me
this 9th day of October, 1907.

Victor Herbert

(Seal.)

Chas. J. Foltz,
Notary Public,
N. Y. Co.



Office Supreme Court
OCT 14 1907
JAMES H. MCKENNEY

IN THE

Supreme Court of the United States.

OCTOBER TERM, 1907.

Nos. 110 and 111.

WHITE-SMITH MUSIC PUBLISHING COMPANY,

Appellant,

against

THE APOLLO COMPANY,

Appellee.

BRIEF FOR VICTOR HERBERT IN SUPPORT OF HIS PETITION TO BE ADMITTED AS CO-APPELLANT AND FOR LEAVE TO BE HEARD AND FILE A BRIEF.

NATHAN BURKAN,
Solicitor and Counsel
For Victor Herbert, Petitioner,
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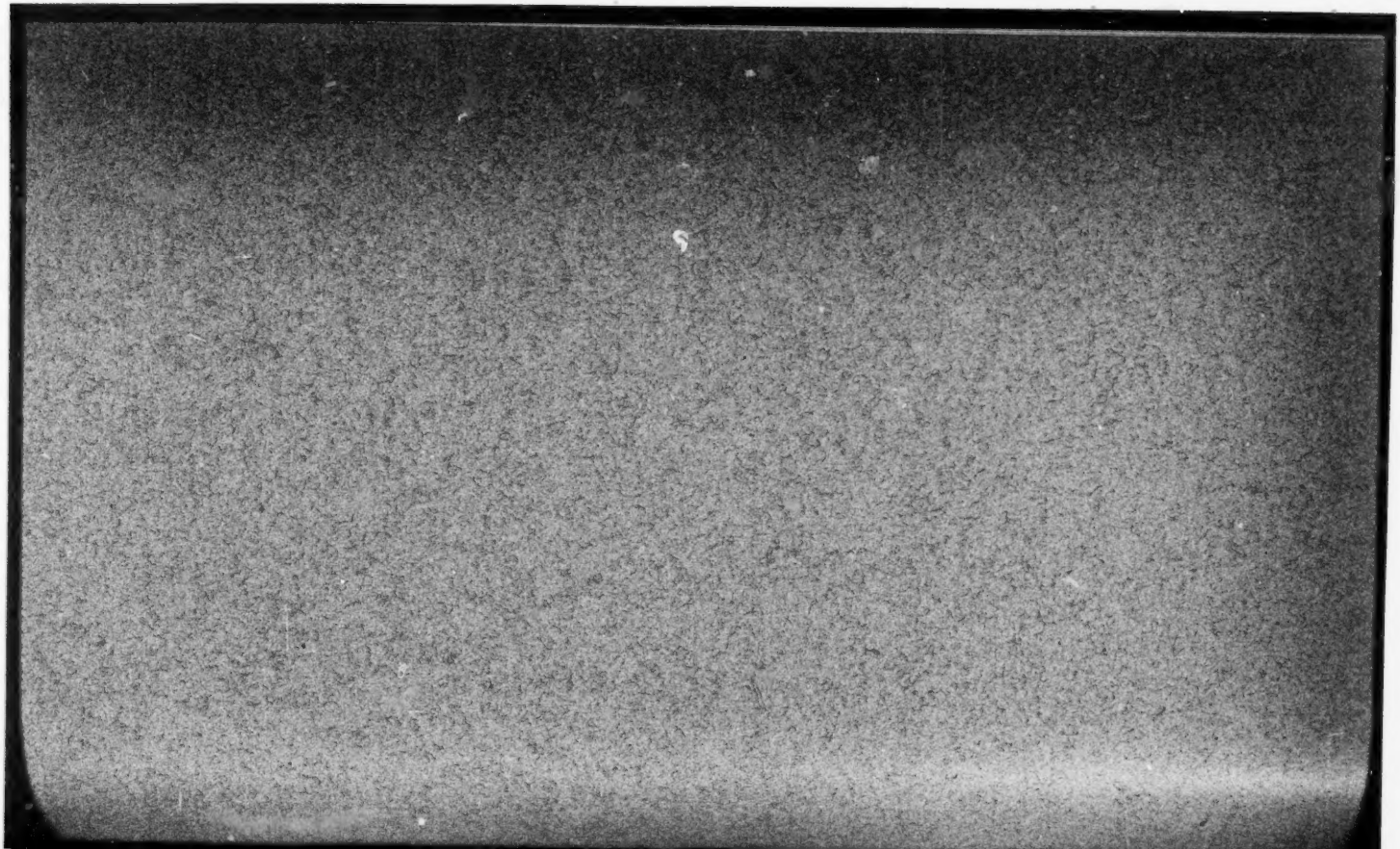
City of New York.



In the Supreme Court of the United States,

OCTOBER TERM 1907.

Nos. 110 and 111.

WHITE-SMITH MUSIC PUBLISHING COMPANY,
Appellant,

against

THE APPOLLO COMPANY,
Appellee.

Brief for Victor Herbert in support of his petition to be admitted as a co-appellant and for leave to be heard and to file a brief.

The copyright statutes should not be construed technically, but with a view to giving effect to the purposes of Congress in enacting this legislation.

This was laid down as the proper rule of construction in the case of Clayton v. Stone, 2 Paine, 382, which was decided by Judge Smith Thompson,

at the time of said decision an associate justice of this Court. In examining into the meaning of the word book, Judge Thompson rejected the "common and ordinary acceptation of the word" and likewise the authority of lexicographers and also "the size, form or shape in which it makes its appearance," but deemed it "more satisfactory to inquire "into the general scope and object of the Legislature for the purpose of ascertaining the sense in which the word book was intended to be used in the statute." And in ascertaining the object of Congress, the Constitution will aid us. "The act in question was passed in execution of the power here given, and the object, therefore was the promotion of science."

Again, in interpreting the language of the Constitutional provision on copyright, we must inquire into the objects of those who framed that provision.

In No. 43 of the Federalist, Madison makes the following statement with regard to that part of the Constitution:

"The utility of this power will scarcely be questioned. The copyright of authors has been solemnly adjudged in Great Britain to be a right at common law. The right to useful inventions seems, with equal reason, to belong to the inventors. The public good coincides, in both cases, with the claims of individuals. The states cannot separately make effectual provision for either of the cases, and most of them have anticipated the decision of this point by laws passed at the instance of Congress."

Twelve of the States had enacted copyright statutes, but not all of them were the result of the resolution of the Colonial Congress referred to by Madison. That resolution which recommended to the several states "to secure to the authors on pub-

lication of any new books not hitherto printed * * * * * the copyright of such books for a certain time," was adopted on May 2, 1783. Three States, Connecticut, Massachusetts and Maryland, had previously passed copyright laws.

The resolution of the Colonial Congress and the State Acts clearly show that copyright was at the time generally recognized as a right existing by the common law and that the object of the American Legislation on the subject was to better secure that right.

The word "secure" occurs in the resolution and most of the State Acts. The word was undoubtedly intended to have the same significance that was attached to it in Millar v. Taylor, 4 Burr, 2303, where its use in the Statute of Anne was cited as inconsistent with the contention that the act created a new right. The controlling influence of the decision in the above case over American legislation on copyright is evident from the fact that the most important principles therein laid down were in their main tenor embodied in the American State acts.

An express recognition of copyright as an existing right is found in the statutes of South Carolina and Virginia.

The act of South Carolina, passed March 26, 1784, provides that the copyright in books already printed shall belong to the author "who hath not transferred to any other the copy or copies of such book or books, share or shares thereof, or the bookseller or booksellers, printer or printers or other person or persons, who has or have purchased or acquired the copy or copies of any book or books, in order to print or reprint the same."

The duration of the copyright in such books already printed is to be 14 years from January 1, 1784, *i. e.*, from a date preceding the passage of the

act; while the term of the copyright of books, not printed and published is to begin from the day of first publication.

The Virginia statute, enacted October, 1785, contains a similar separate provision as to books already printed, as follows:

"That the author of any book or pamphlet already printed, being a citizen of any one of the United States, who has not transferred to any other person or persons the copy or copies of any such book or pamphlet, share or shares thereof, his heirs and assigns, or the person or persons who have purchased or acquired such copy or copies, share or shares, in order to print or reprint the same, his heirs and assignees, shall have the exclusive right of printing or reprinting such book or pamphlet, within this Commonwealth, for the term of 21 years, to be computed from the first publication thereof."

Copyright is in these statutes treated as a well defined right which was divisible and transferrable.

Most of the states prefaced their copyright statutes by preambles in which they stated upon what principles copyright was founded and what purposes and policies should prevail in protecting it by law.

In eight of the State copyright statutes, copyright is declared to be a natural right, a right founded in justice and equity. The declarations of principle and policy found in those acts throws much valuable light on the views which influenced the language of the Federal Constitution and the first copyright statutes.

Connecticut declared:

"It is perfectly agreeable to the principles of

natural equity and justice, that every author should be secured in receiving the profits that may arise from the sale of his works, and such security may encourage men of learning and genius to publish their writings; which may do honor to their country and service to mankind." Act of January, 1783.)

Massachusetts:

"The improvement of knowledge, the progress of civilization, the public weal of the community, and the advancement of human happiness, greatly depend on the efforts of learned and ingenious persons in the various arts and sciences: As the principal encouragement such persons can have to make great and beneficial exertions of this nature, must exist in the legal security of the fruits of their study and industry to themselves; and as such security is one of the natural rights of all men, there being no property more peculiarly a man's own than that which is produced by the labor of his mind." (Act of March 17, 1783.)

New Jersey:

"Learning tends to the embellishment of human nature, the honour of the nation, and the general good of mankind; and as it is perfectly agreeable to the principles of equity, that men of learning who devote their time and talents to the preparing treatises for publication, should have the profits that may arise from the sale of their works secured to them" (Act of May 26, 1783).

New Hampshire:

"The improvement of knowledge, the progress of civilization, and the advancement of human happiness, greatly depend on the efforts of ingenious persons in the various arts and sciences; as the principal encouragement such

persons can have to make great and beneficial exertions of this nature, must consist in the legal security of the fruits of their study and industry to themselves; and as such security is one of the natural rights of all men, there being no property more peculiarly a man's own than that which is produced by the labour of his mind" (Act of November 7, 1783).

Rhode Island:

"The improvement of knowledge, the progress of civilization, the public weal of the community, and the advancement of human happiness, greatly depend on the efforts of learned and ingenious persons, in the various arts and sciences; as the principal encouragement such persons can have to make great and beneficial exertions of this nature, must exist in the legal security of the fruits of their study and industry to themselves; and as such security is the natural right of all men, there being no property more peculiarly a man's own than that which is produced by the labour of his mind." (Act of December, 1783).

North Carolina:

"Nothing is more strictly a man's own than the fruits of his study, and it is proper that men should be encouraged to pursue useful knowledge by the hope of reward; and as the security of literary property must greatly tend to encourage genius, to promote useful discoveries, and to the general extension of arts and commerce" (Act of November 19, 1785).

Georgia:

"The principles of natural equity and justice require that every author should be secured in receiving the profits that may arise from the sale of his works, and such security may encourage men of learning and genius to

> publish their writings, which may do honor to their country, and service to mankind" (Act of February 3, 1786).

New York:

> "It is agreeable to the principles of natural equity and justice that every author should be secured in receiving the profits that may arise from the sale of his or her works; and such security may encourage persons of learning and genius to publish their writings, which may do honour to their country and service to mankind" (Act of April 29, 1786).

These State laws and the declarations of principles and the provisions therein were familar to the framers of the Constitution. As the same legislatures who had recently enacted those laws were expected to consent to the copyright clause in the Federal Constitution, their views may be supposed to have been considered by those who framed that clause.

The provisions of the State laws were substantially taken from the English law and the declarations of principle contained in the preambles had their source in the decisions of the English courts, especially the decision in Millar v. Taylor. The fact that the framers of the Constitution were familiar with the English law and the English decisions on the subject of copyright is attested by Story. In Section 1152 of his Commentaries on the Constitution, he says: "The copyright of authors in their works had, before the Revolution, been decided in Great Britain to be a common law right; and it was regulated and limited under statutes passed by Parliament and upon that subject. * * * It was doubtless to this knowledge of the common law and

statutable rights of authors and inventors, that we are to attribute this constitutional provision."

In a decision of this Court (Lithographic Co. v. Sarony, 111 U. S., 53), it was pointed out that the framers of the Constitution may be supposed to have understood the nature of copyright, because the subject had then recently been thoroughly discussed in the judicial tribunals of England and these discussions had attracted wide attention; and the Court stated that copyright as its nature was then commonly understood was "the exclusive right of a man to the production of his own genius or intellect" (at p. 58).

That copyright was well known as an existing and recognized right, is also evident from the language used by those who were actively concerned in the drafting of the Constitution. The first proposed draft of a Constitution submitted to the Constitutional convention did not include any provision as to copyright. Such a provision was first submitted, together with a number of propositions specifying additional powers of Congress, in the session of the convention on August 18, 1787.

The clause as then submitted, was worded as follows:

"To *secure* to literary authors *their* copyrights for a limited time." (Journal, Acts and Proceedings, of the convention, pages 259, 260.)

It was not proposed to grant to authors a new right, but to "secure," *i. e.*, to effectually guard, to insure, to them the right that already was theirs, "their copyright."

In the committee to which this and other provisions were referred for final editing, the language was somewhat changed so as to let in patent right, and instead of "their copyrights" the words "the exclusive right to their * * writings" were used. But the word "secure" was retained.

The word "secure "was again used by Congress in the title of its first copyright act.

Congress in that act also made provision for books already printed and therein distinctly recognized an existing copyright.

Section 1, of the Statute of 1790, provides for the term of copyright of authors of maps, charts or books already printed, who "have not transferred to any other person or persons the copyright of such map, chart, book or books, share or shares thereof," and of those who "have purchased or legally acquired the copyright of any such map, chart or books in order to print, reprint, publish or vend the same."

It is evident from all these facts that the copyright legislation of Congress is not to be considered as creating a new right, but as confirming and more effectually protecting a right which was recognized as existing in all the states as a common law right and which in almost all the states was defined by statute. Congress itself, in the Act of February 15, 1819, referred to the copyright and patent statutes as laws "granting or *confirming*" the exclusive right of authors and inventors, the added word "confirming" being solely applicable to copyrights.

The people did not turn to Congress, because there was no copyright and Congress alone could create the right. The states had a copyright law, but they preferred federal legislation because that could give to authors better, more substantial protection than State legislation could do.

Madison briefly intimates this in No. 43 of the Federalist. (*supra*).

Story gives a fuller explanation in Section 1152 of his Commentaries on the Constitution, as follows:

"This power did not exist under the Confedera-

tion; and its utility does not seem to have been questioned. * * * It was beneficial to all parties, that the National Government should possess this power; to authors and inventors because, otherwise they would have been subjected to the varying laws and systems of the different States on this subject, which would impair and might even destroy the value of their rights; to the public, as it would promote the progress of science and the useful arts, and admit the people at large, after a short interval, to the full possession and enjoyment of all writings and inventions without restraint. In short, the only boon which could be offered to inventors to disclose the secrets of their discoveries, would be the exclusive right and profit of them, as a monopoly, for a limited period. And author's would have little inducement to prepare elaborate works for the public, if their publication was to be at a large expense, and, as soon as they were published, there would be an unlimited right of depredation and piracy of their copyright."

The circumstances under which the foundation of our copyright system was laid, unmistakably show the principal aim to have been—real, substantial protection to the author. And in construing the law that aim must be our guide. And such it has been in the past.

Congress has been guided by that purpose in giving a liberal construction to the Constitution.

The Constitution uses the word "writings' 'to indicate the subjects of copyright.

The first copyright act which was passed by the first Congress sitting immediately after the adoption of the Constitution, names maps, charts and books as the works to be protected. As was pointed out in the decision of this Court in the Sarony case (111 U. S., at p. 58), the scope of that act is incompatible with a literal construction of the word

"writings" which would limit its meaning to the actual script of the author and would exclude books and all other printed matter.

The Seventh Congress, in the act of 1802, still further deviated from the strict meaning of the word "writings" and added historical and other prints to the subjects in regard to which authors were to be secured.

These Congresses, being composed largely of men who took part in the formation of the Constitution and in the discussions and events that preceded it, evidently took the language of this Constitutional clause as being intended to cover in concise form those views of the nature of copyright that were expressed in the preambles of the State Acts and represented the common understanding on this subject. According to these views men were to be secured, as those State acts put it, "in their works," in the "fruits of their study and industry," in "that which is produced by the labor of his mind," or, as this Court states it in the Sarony case (p. 58), "in the production of their own genius or intellect."

The act of February 3, 1831, added engravings and cuts and musical composition to the subjects of copyright. The judiciary committee of the Twenty-first Congress which framed that act expressed in its report the following views:

"Your committee believe that the just claims of authors, require from our legislation a protection not less than what is proposed in the bill reported. From the first principles of proprietorship in property, an author has an exclusive and perpetual right in preference to any other, to the fruits of his labor. Though the nature of literary property is peculiar, it is not the less real and valuable. If labor and effort in producing what before was not possessed or known will give title, then the literary man has title, perfect and absolute, and should have

his reward." (Wheaton vs. Peters, 8 Peters, at pp. 690, 691.)

This report which was adopted by Congress, is significant because the position is therein taken that under the copyright provision of the Constitution, it is the duty of Congress to give to authors the fullest protection that can be provided.

Congress took that position as to all new forms of intellectual production. As soon as they assumed sufficient importance to require legislative action for the protection of American authors, Congress extended the copyright laws so as to cover these new arts.

In 1865 photographs and the negatives thereof were included among the subjects of copyright, and in 1870 statuary, paintings, chromos and models or designs intended to be perfected as works of the fine arts, were added.

Some of these forms of intellectual production cannot be classed as "writings" unless the broad purposes aimed at by the constitutional provision are considered rather than its language.

Yet, the action of Congress in giving so very liberal a construction to the copyright clause has been endorsed by this Court.

In Trade Mark Cases, 100 U. S., at p. 94, it is said that "the word writings may be liberally construed, as it has been, to include original designs for engravings, prints, &c." And in the Sarony case it was held that Congress "very properly has declared writings to include all forms of writing, printing, engraving, etching, etc., by which the ideas in the mind of the author are given visible expression" (111 U. S., p. 58).

As Congress in construing the copyright clause of the Constitution has considered and sought to give effect to the broad purposes of the framers of that provision, so must those purposes

be considered in construing the acts of Congress.

The very language used by Congress in its acts is not compatible with a narrow, technical construction. In defining the extent of the rights to be protected and the scope of protection to be provided Congress adds to terms of limited import general terms sufficiently elastic to be applicable to matters not specified.

In Section 4965 of the Revised Statutes it is declared an infringement of the copyright in a map, chart, dramatic or musical composition, etc., for any person to "engrave, etch, work, *copy*, print, publish, dramatize, translate, or import, *either in whole or in part, or by varying the main design, with intent to evade the law*," etc., such map or other article.

Similar terms, excepting the words "dramatize, translate," were used in Section 7 of the Act of 1831. And in a case arising under that Act the word "copy" was held to cover a photograph made of an engraving, although the art of photography was unknown when the Act of 1831 was passed. (Rossiter v. Hall, 5 Blatchf, 363).

In deciding the Rossiter case Judge Benedict said: "The word copy is a general term, added to the more specific terms before used, for the very purpose of covering methods of reproduction not included in the words engrave, etch or work." The Judge cites the English case of Gambart v. Ball, 14 C. B., N. S., 306, where upon a similar construction of the word "copy" the copyright of the engraving of Rosa Bonheur's "Horse Fair" was held to be infringed by photographing it. The Judge finally reasons at p. 364 that "to hold, otherwise, would work a substantial repeal of the copyright laws in many cases. For not only engravings, but books may be reproduced by the photographer and under the construction claimed by the defendant authors

and publishers would be in no way protected against such reproduction of their works, while the art has been carried to such perfection that the photographic copies of certain classes of engravings which can be produced at a trifling cost are, for the purposes of trade, nearly, or quite equal to the originals."

The construction given in the above case to the word "copying" is supported by the language of the Act of 1802, which extended copyright to historical and other prints. Section 2 of that Act gave a copyright to every person who shall invent and design, engrave, etch or work such print, and Section 3 makes it an offence (for any other person, without consent, to "engrave, etch, or work, as aforesaid, *or in any other manner copy* or sell or cause to be engraved, copied or sold, in the whole or in part, by varying, adding to, or diminishing from the main design" * * * any such print.

These elastic terms were evidently chosen because the words printing and reprinting, used in the first Act with reference to books, charts and maps were found too narrow to cover the possible reproductions of prints.

In 1831 the term "printing" was found too narrow for all works other than books. Maps and charts were separated from books and together with prints, cuts, engravings and musical compositions were collected in a class the characteristic feature of which was that the works included therein admitted of methods of reproduction other than printing. And in order to cover all possible forms of reproduction Section 7 used, in defining infringements, in addition to the words "engrave," "etch," "work," "print," the more comprehensive word "copy" and the expression "either on the whole or by varying, adding to or diminishing the main design with intent to evade the law." The word "copy" is used without the additional words

"in any other manner," but the context shows that it is intended to be equally comprehensive.

The Act of 1831 specified no other method of copying a book but printing. But a photographic reproduction of a book, though not a reprint, was held to be a copy in the above cited case of Rossiter v. Hall.

In the Act of 1870 and the subsequent statutes "copying" is mentioned in the affirmative statement as the author's rights. (Section 84 of Act of 1870, Section 4952 of Rev. Stat.)

The right to lithograph a painting is not specified in the law. But on the ground that photographing was copying it was held in Schumacher v. Schwencke, 30 Fed., 690, that a lithographic print was an infringement of a copyrighted painting. Judge Coxe, in deciding that case, said at p. 691: "It would be a strained construction to hold that the statute only protected the sale of copies made in precisely the same manner as the original. It will hardly do to say that a water color is not infringed by an oil or crayon or a lithographic facsimile. The statute is not so technical. Its design is to give substantial and not merely a fanciful protection."

In Werckmeister v. Pierce & Bushnell Mfg. Co., 63 F., 445, at p. 449, Judge Putnam cites the above decision of Judge Coxe as laying down the law correctly—"that the author or proprietor of a painting, who properly copyrights it, is protected against all reproductions of it in any form."

In Clayton v. Stone, 2 Paine, 382, (decided by Judge Thompson) and in Scoville v. Toland, 6 Western Law Journal, 84, (decided by Judge McLean) a single sheet was held to be a book within the meaning of the statute. And the last mentioned decision was cited as a correct statement of the law in Higgins v. Keuffel, 140 U. S., 428, at p. 431.

In the light of what has been said it was error

to decide the question involved in this action upon a technical construction of the statute and to conclude that the statute afforded no protection to the proprietor of a copyrighted musical composition against the form of reproduction resorted to by the defendant.

The provisions defining musical copyright must be so construed as to give effect to the purposes of Congress as they appear not only from the language of its acts, but from the mandate of the Constitution and from the scope to be given to that language in view of the purpose of its framers.

Musical copyright must be interpreted so as to promote the musical art, so as to give to the composer substantial protection of his right to enjoy exclusively all the fruits of his intellectual labor. That is what Congress aimed at and that is what must be accomplished so far as any reasonable construction of the statute will permit.

Congress in Section 4952 of the Revised Statutes has given an enumeration of the intellectual works which may be copyrighted and of the rights therein which shall be secured to the authors.

Musical compositions are explicitly named among the subjects of copyright here enumerated.

In the previous discussions of this issue, some fine-spun arguments have been advanced as to what is meant by a musical composition. It has been said that since the Constitution speaks of writings, the statute means the written or printed staff notation of the musical composition only, and does not mean the ideas of the composer, except in this particular form of embodiment.

The contention as stated does not affect the issue directly. The musical compositions affected by this action and almost all musical compositions now in existence are written in staff notation. They are, upon the strictest construction of the statute and

the Constitution, entitled to the protection of copyright.

But the contention mentioned is used as a stepping stone for an argument that solely touches the question of infringement. If, it is said, the ideas themselves are not protected, but the staff notation of the same only, then a reproduction of the ideas by any mode other than duplicating the staff notation is not an infringement.

How will that contention look if we let the light of the fundamental purposes of American copyright shine on it?

Those purposes were that authors are to be secured in receiving the fruits of the labor of their minds, firstly because it is their natural right, secondly because it is the principal encouragement that can be given them to make exertions in the various arts and sciences on which exertions the progress of civilization, the advancement of human happiness and the public weal of the community greatly depend. (See preambles of state copyright statutes, *supra*).

What are the fruits of the composer's mental labor? Do they not include the musical ideas, the order and combination of musical sounds invented and elaborated by him? Are not these ideas, the order and combination of sounds—in fact the essence of his work? Does not the use of his product consist in the enjoyment by the ear of those ideas, that order and combination of sounds? And if the exclusive right to the reproduction of those ideas, that order and combination of sounds, were not secured to him, if their use were left free to be appropriated to the profit of others, would the composer's security in receiving the fruits of his labor be real, be such as would encourage him to make exertions in his art?

In determining the scope of the Acts of Congress

the Courts have consistently had resort to those fundamental principles.

In Trade Mark Cases, 100 U. S., at p. 94, it was held that only such works are to be protected by copyright as are "original and are founded in the creative powers of the mind."

In Higgins v. Keuffel, 140 U. S., 428, the Court cites Scoville v. Toland, 6 Western Law Journal, 84, where Justice McLean held that the copyright law applies to "compositions which are intended to instruct and amuse the reader though limited to a single sheet or page; of this character would be lunar tables, sonata, music and other mental labors concentrated on a single page."

In Holmes v. Hurst, 174 U. S., 82, 89, it was held: "It is the intellectual production of the author which the copyright protects and not the particular form which such production ultimately takes, and the word "book" as used in the statute is not to be understood in its technical sense of a bound volume, but any species of publication which the author selects to embody his literary product."

In the case last cited a statement occurs which has been stretched into an authority for the contention that the ideas of the author are not entitled to protection. The Court says at p. 83 that copyright is not "a right to ideas alone, since in the absence of means of communicating them they are of value to no one but the author."

The Court apparently refers to ideas that have not taken sufficiently definite shape to be capable of identification and protection. This is made clear by what follows the sentence quoted. The Court proceeds as follows:

"But the right is to that arrangement of words which the author has selected to express his ideas. Or, as Lord Mansfield describes it, 'an incorporeal right to print a set of intellectual ideas or modes of

thinking, communicated in a set of words or sentences and modes of expression. It is equally detached from the manuscript or any other physical existence whatsoever,' 4 Burrows, 2396. The nature of this property is perhaps best defined by Mr. Justice Erle, in Jefferys v. Boosey, 4 H. L. C., p. 815, 867: 'The subject of property is the order of words in the author's composition, not the words themselves, they being analgous to the elements of matter, which are not appropriated unless combined, nor the ideas expressed by those words, they existing in the mind which is not capable of appropriation."

The right does not apply to ideas as long as they exist only in and as part of the mind, which (the mind) is incapable of appropriation.

These statements of the law can never support the right to appropriate any musical idea that has found expression and thereby a means of identification and communication in the form of a musical composition.

The definitions cited from Lord Mansfield and Justice Erle refer to literary productions which may be described as compositions in words. In musical compositions tones take the place of words, bars and airs the place of sentences and modes of expression. With that substitution Lord Mansfield's definition would read: "a set of intellectual ideas or modes of thinking communicated in a set of tones or bars and airs; and Justice Erle's definition would be: the order of tones in the author's composition. And if we add the remark of Lord Mansfield that the right to that set of tones is "equally detached from the manuscript or any other physical existence," we find that the decision in Holmes v. Hurst, instead of upholding, entirely refutes the contention that copyright does not pro-

tect the ideas of a completed, identified and copyrighted musical composition.

The physical form in which the composition is embodied does not determine or limit the right. In Millar v. Taylor, 4 Burr, 2302-2349, it was said:

> "The printing of it (book) is a mere mechanical act; and the method only of publishing and promulging the contents of the book. The *composition* therefore is the *substance*. The *paper, ink, type*, only the *incidents* or *vehicle*.
>
> The value proves it. And though the defendant may say 'those *materials* are mine' yet they cannot give him a right to the *substance*, and to the multiplying of the copies of it, which (on whose paper or parchment soever it is impressed) must *ever be invariably the same*. Nay, his mixing, if I may so call it, his such like materials with the author's property, *does not* render the author's property *less distinguishable* than it was *before;* for, the *identical work* or *composition* will still appear, beyond a possibility of mistake."

The same point was discussed in Stephens v. Cady, 14 How., 528, where the Court held that a purchaser of a copperplate of a map on an execution sale did not acquire the right to print and sell the map. "We are satisfied," says the Court at p. 530, "that the property acquired by the sale in the engraved plate and the copyright of the map secured to the author under the Act of Congress are altogether different and independent of each other, and have no necessary connection. The copyright is an exclusive right to the multiplication of the copies for the benefit of the author or his assigns, disconnected from the plate or any other physical existence. It is an incorporeal right to print and publish the map or, as said by Lord Mansfield in Millar

v. Taylor, 4 Burr, 2396, 'a property in notion and has no corporeal, tangible substance.' "

Blackstone says, 2 Com., 406, that "the same conceptions clothed in the same words must nesessarily be the same composition and whatever method be taken of exhibiting that composition to the ear or eye of another by recital, by writing or by printing * * * it is always the identical work of the author which is so exhibited."

All this applies to musical compositions with greater force than to any other class of intellectual productions. A musical composition is a combination of sounds intended for the ear. The ideas of the composer are expressed in tones, not in staff notation. The notation serves as one means to the end of making possible the reproduction of the compostion to the ear. But the notation is not a necessary means to that end. If the result is obtained by other means, the purpose of reproduction is equally realized.

Because of this characteristic that any reproduction will answer the same purpose that accomplishes the same effect, a musical composition should be subject to the same rule that applies to a patented invention. This view was taken in Thomas v. Lennon in 14 Fed. 849, 853, where Judge Lowell said that "an opera is more like a patented invention than like a common book; he who shall obtain similar results better or worse, by similar means, though the opportunity is furnished by an unprotected book, should be held to infringe the rights of the composer."

In West v. Francis, 5 B. & Ald., at pp. 737, 743, it was held with reference to prints: "A copy is that which comes so near to the original as to give every person seeing it the idea created by the original."

By analogy, a copy of a musical composition must be held to be that which gives every person

hearing it the idea created by the original.

It was so held in the case of D'Almaine v. Boosey, Younge & Collyer's Exch. R., 288, 301, 302, where it was said that "it is the air or melody which is the invention of the author," and that its reproduction, though in a different arrangement or in an adaptation to a different instrument, is piracy and "the ear tells you, it is the same." This statement of the law was cited with approval by Judge Blatchford in Daly v. Palmer, 6 Blatch., 256, at p. 266, and by Judge Nelson in Jollie v. Jacques, 1 Blatch, 618, 625.

As a musical composition is wholly intended for the ear, musical copyright would cease to secure substantial protection to the composer if it did not protect him against the multiplification of every means of reproducing his music to the ear.

In Story v. Holcombe, 4 McLean, 306, 310, Judge McLean, speaking of abridgements, said: "The inquiry is what effect must the extracts have upon the original work. If they render it less valuable by superseding its use, in any degree, the right of the author is infringed."

In the case of a musical composition anything that will serve to reproduce the same music to the ear must supersede the composer's work.

In a catalogue circulated by the defendant in this action it is claimed with reference to the perforated music rolls sold by defendant: "There is no composition, however elaborate or simple, that they will not execute with equal precision and thoroughness * * * * * all as though some masterhand were rendering to the ear the splendid fashion of a Bach, or the sublime harmonies of a Mendelsohn or Beethoven." (Record, page 298.)

Since the introduction and perfection of automatic musical instruments and of rolls and records for the same the conditions affecting the musical

art in the United States have become revolutionized.

These instruments and rolls and records were not of much practical importance until about twelve years ago, but since then their manufacture and sale have increased at an extraordinary rate.

In 1900 an annual production of 6382 piano players, piano playing attachments and self-playing pianoes was reported by the Census. (12th Census, Manufactures, Vol. IV., page 451).

In 1905 the annual production of the same instruments had increased to 22,502. (Bulletin 82, Census of Manufactures, 1905, page 16).

In 1900 there were produced 151,403 phonographs, graphophones and gramophones. (12th Census, Manufacturers, Vol. IV., page 182).

In 1905 the production of these machines was more than twice as much in value as in 1900. (Bulletin 82, page 32).

For use with these instruments many millions of perforated rolls and records, each being the reproduction of a musical composition, have been manufactured during the short period of time above indicated.

In 1900 there were manufactured for phonographs, graphophones and gramophones 2,763,277 records having a value of $539,370, and in 1905, the annual production of these records had increased to a value of $4,678,547, being nearly eight times that of 1900, and indicating a much larger increase in number. (12th Census, Manufactures Vol. IV., page 181; Bulletin 82, page 32).

As to the number of perforated rolls used in connection with piano players, piano playing attachments, self-playing pianos and organs, there is evidence in the record of this case showing that during the year 1902 from one million to one and a half million rolls were made in the United States.

DARK PAGE BLEED THRU

this appeal. The defendant has sold and is selling without the petitioner's consent, large numbers of perforated rolls representing copyrighted compositions of the petitioner, and if the judgment of the Circuit Court of Appeals herein is affirmed, the defendant will continue to appropriate the petitioner's works without the consent of the petitioner and without any hope on the part of the petitioner to secure protection against defendant's acts.

It is respectfully submitted that the petition should be granted and the above brief be received and considered by the Court.

Nathan Burkan

Solicitor and Counsel for the Petitioner.

In the SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1907

WHITE-SMITH MUSIC PUBLISHING COMPANY, *Appellant*, *vs.* APOLLO COMPANY, *Appellee.*	Nos. 110 and 111

APPEAL FROM UNITED STATES CIRCUIT COURT OF APPEALS, SECOND DISTRICT.

PETITION OF THE DEKLEIST MUSICAL INSTRUMENT MANUFACTURING COMPANY AND OF THE RUDOLPH-WURLITZER COMPANY FOR LEAVE TO BE HEARD AND FILE A BRIEF, ON THE SIDE OF THE APPELLEE.

To the Supreme Court of the United States:

Your petitioners, the DeKleist Musical Instrument Manufacturing Company, of North Tonawanda, New York, and the Rudolph-Wurlitzer Company, of Cincinnati, Ohio, respectfully show that they are corporations, created and existing under form of law, the former in New York, the latter in Ohio, and having their respective principal office and place of business at the city named.

That they both are heavily and vitally interested pecuniarily and industrially in the decision of the above entitled cases, and that a decision here in favor of the Appellant would mean the practical extinguishment of the business and life-work of your Petitioners.

Wherefore your petitioners respectfully pray that they may be permitted to file a brief and be heard on the side of the Appellee in said cases; and your petitioners also pray for such other relief as to the Court may seem proper.

And in amplification of this petition, your petitioners respectfully represent the following facts:

First.—The business of your petitioner, the DeKleist Musical Instrument Manufacturing Company, consists entirely of the manufacture of automatic and mechanical musical instruments, which devices are protected by more than a hundred letters patent of the United States at a cost of over one hundred thousand dollars.

These instruments are operated by and in connection with a controller, varying in character with the different instruments, a "barrel" (so-called) in organs, perforated rolls of paper in the cases here.

Second.—The business of your petitioner, the Rudolph-Wurlitzer Company, consists entirely of the sale of the instruments and devices manufactured as above by the DeKleist Musical Instrument Manufacturing Company and the manufacture and sale of similar instruments and appurtenances.

Third.—In this business is employed all the capital and property of your petitioners, consisting of large, complete and specially constructed and equipped factories, United States patents of almost incalculable value, and other appurtenant property, all representing an actual invested outlay of over two million dollars. And although the production of all these goods is wholly within the United States, the resultant manufactured product is sent all over the world.

Fourth.—The contention of the Appellant herein, under all the evidence and proceedings had, cannot logically be supported except upon the theory that a copyright on a musical composition is infringed by any instrument or part of an instrument which is adapted to sound out upon the air the particular tune or melody represented by that musical composition.

This contention was negatived by both decisions below.

Fifth.—In the various instruments manufactured and sold by your petitioners, different mechanical elements or devices are used to control the automatic, mechanical and audible production of music, such as the "barrels" or "pin cylinders" of music boxes and organs, and which have been in common use and known to all men (and hence in the purview of Congress when copyright legislation was had) for three-quarters of a century. The perforated paper roll came later as a mechanical improvement. The proposition here involved, and the copyright violation, if any, is, however, the same. It must be held that these "barrels" and "pin-stuck" cylinder organs are "writings" (whether or no they are capable of sounding out upon the air some melody resembling a copyrighted or uncopyrighted song) to bring us and our products within the claim of this Appellant.

For fifteen years (McTammany case, decided January, 1888) no attempt was made to so interpret the law.

The doctrine of "stare decisis" should apply.

Sixth.—Immediately after the decision in the McTammany case (33 Fed. Rep., 584), and in reliance upon an absolutely unbroken line of judicial decisions of every court in the United States, and England as well, before which this question has ever come, Mr. DeKleist, of your petitioners, came to this country, in good faith, believing, as he surely had a right to believe, that the laws of this land would protect him and his, created a new industry, invested his all in it, sought and obtained and paid for the protection of the patent laws of the United States, built large factories, gave employment to a whole community of wage-earners, and in common with others similarly occupied gave the world a new delight and pleasure, brought the presence and opportunity of music within the reach of all—and then attracted the attention of these music publishers to a possible source of revenue, and thereupon they proposed through the hoped-for intervention of this Court and of Congress to practically confiscate the fruit of the life-work of your petitioners.

Seventh.—The Aeolian Company, a ten million dollar Connecticut corporation, has by advance contracts with substantially every music publisher in the United States, secured, in the event of a favorable decision here, an entire monopoly of all music published for the next thirty odd years(see Copyright Hearings, pages 299-304), and is the real, actual party in interest here upon the part of the Appellant. Its successs here would result in the complete obliteration of the business of your petitioners.

Eighth.—It is the theory of the Appellee herein, amply sustained by the evidence below and by the facts brought out at the congressional hearing, that the automatic and mechanical reproduction of music is a very material advertising aid to the composer of copyrighted music. But in any event, the composer or the publisher never received anything under the decisions heretofore for the use of their compositions in these machines and hence nothing is being taken from them which they now possess or have ever had. And no corresponding benefit could possibly accrue to anyone in compensation for the large vested interests which would be utterly ruined by an unfavorable decision here. The whole and only benefit would redound to the Aeolian Company and their allied publishers. This has even been anticipated by them. See Copyright Hearings at page 300.

And because your petitioners' interests are different than those of the parties to these actions and because they are manufacturers of a type of instrument varying in design and method of construction and operation, your petitioners believe that their interests and that of large similarly situated concerns justify this petition, and they verily believe that the questions involved will hence be more adequately urged if your petitioners are permitted to be heard on these appeals and to submit a brief to the Court.

Wherefore your petitioners again pray for permission to be heard and also to file a brief on the side of the Appellee in the above entitled cases, and for such other relief as to the Court may seem proper.

THE DEKLEIST MUSICAL INSTRUMENT MANUFACTURING COMPANY.

THE RUDOLPH-WURLITZER COMPANY.

GEORGE W. POUND,
Counsel.

STATE OF NEW YORK,
COUNTY OF ERIE,
City of Buffalo. } ss.

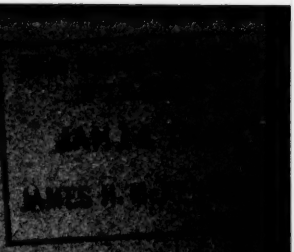
GEORGE W. POUND, being duly sworn, doth depose and say that he is attorney and solicitor for the petitioners herein, The DeKleist Musical Instrument Manufacturing Company and The Rudolph-Wurlitzer Company, and that he personally prepared the foregoing petition and knows the contents thereof; that the statements contained in said petition are accurately true according to the best and utmost of his information, knowledge and belief, which was carefully acquired and is mainly of record, and is all to deponent thoroughly familiar and is founded on convincing evidence.

That deponent is general counsel of said petitioners and as such represented them on the copyright hearings and hence is thoroughly familiar with all the facts and circumstances herein.

GEORGE W. POUND...

Subscribed and sworn to before me
this 4th day of November, 1907.

(SEAL) JOHN D. CLUTE,
Commissioner of Deeds,
in and for said City of Buffalo.



Supreme Court of the United States

OCTOBER TERM, 1907

Nos. 110 and 111

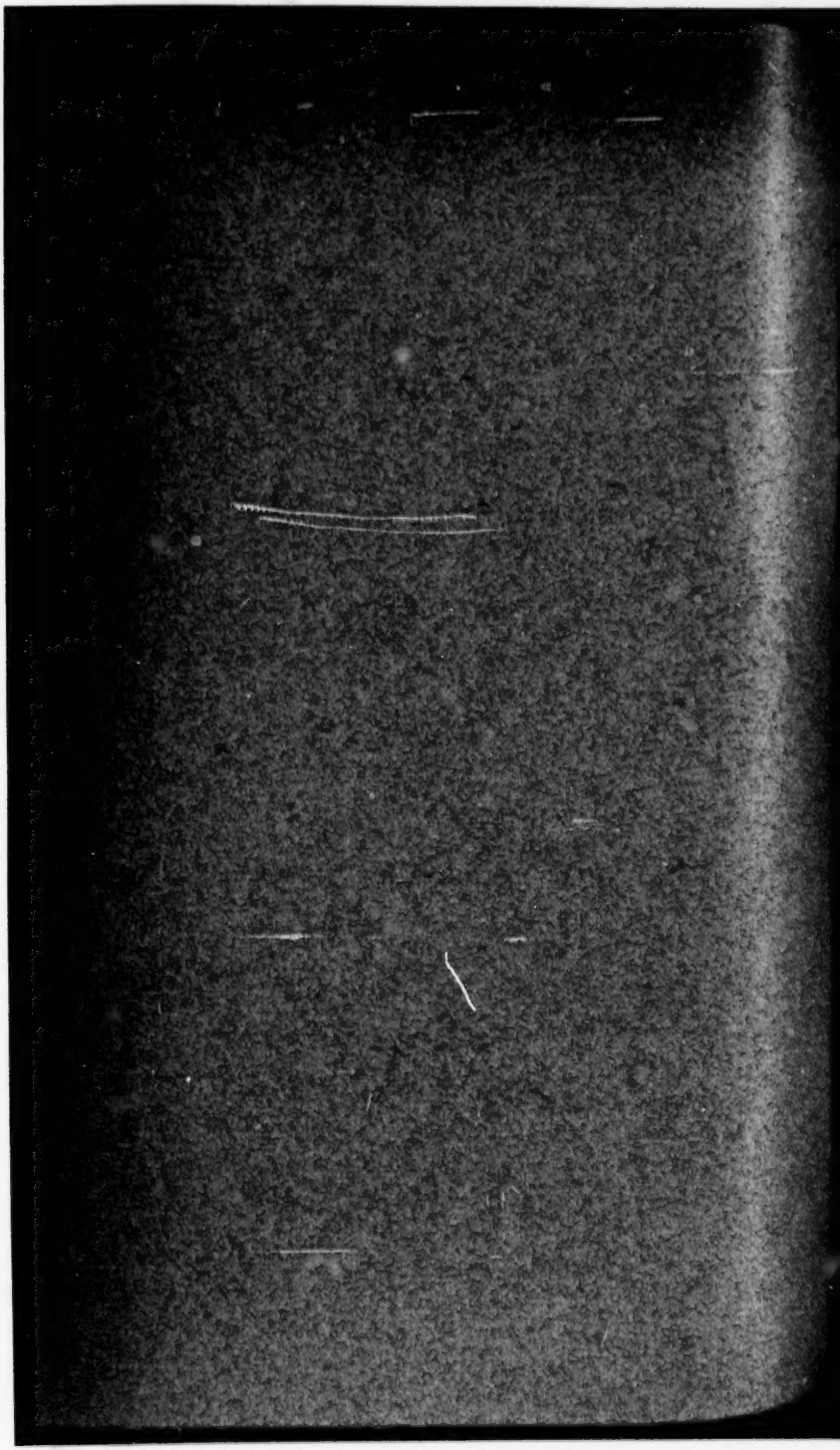
WHITE-SMITH MUSIC PUBLISHING CO.,
APPELLANT
vs.
APOLLO COMPANY, APPELLEE

APPEALS FROM UNITED STATES CIRCUIT COURT OF APPEALS, SECOND CIRCUIT

Brief on the Side of the Appellee by The DeKleist Musical Instrument Mfg. Co. and The Rudolph Wurlitzer Company

GEORGE W. POUND,
Counsel.

PRESS OF W. F. ROBERTS CO., WASHINGTON



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STATEMENT.

These are Appeals from the United States Circuit Court of Appeals, Second District, unanimously affirming the decision below in favor of the Defendant.

The actions were brought upon alleged infringement of the copyright on a piece of ordinary sheet music, the infringement consisting of a roll of perforated paper, technically termed a "controller," which as a mechanical adjunct in connection with other interchangeable parts of a

machine or instrument causes music to be sounded from an automatic or mechanical musical instrument.

Briefs and arguments upon the Record, upon the legislative and constitutional history of copyright in the United States and all foreign countries, and upon all foreign adjudications upon the subject, having peen previously filed herein, the present Brief will confine itself to points not so fully covered elsewhere.

I.

The Doctrine of stare decisis applies here with strong and unusual emphasis.

Twenty years ago the law upon this question was settled in the now leading and famous McTammany case (Kennedy *v.* McTammany, 33 Fed. 584, decided January, 1888), which held that the perforated music roll was not within the realm of copyright. No court in the United States or England has decreed to the contrary or given any other construction to this or similar statutes. The Aeolian Co., the real complainant here (Record pages 345-349), was then engaged, as now, in the manufacture and sale of automatic or mechanical musical instruments using perforated paper rolls, and was the largest and best known of such manufacturers. That case was decided upon full consideration after extended argument and discussion. One of the best equipped practioners of the time in that line conducted the fight for the complainant, and after adverse decision appealed to this court, but here abandoned his appeal (145 U. S.). They rested upon that decision.

In every case in this land, and with two exceptions every case in the world, this doctrine has ever since been affirmed and strongly upheld.

Were not these decisions authoritative declarations of the law on this subject, and a rule of property upon which we had the right to rely ?

There is not, in the common law, a maxim more eminently just and promotive of the public convenience than that of *stare decisis.* If law, well established, may be annulled by a decision twenty years after, a foundation is laid for the most restless instability. No system of inflexible adherance to established law can be as pernicious to business interests as fluctuative decisions along industrial lines.

Relying, as they surely believed they had a right to rely upon the seemingly well settled law of the land, the people here represented, soon after the decision in the *McTammany* case, in good faith, put their all in this industry of the manufacture of musical instruments, built large factories, gave employment to whole communities of wage-earners specially trained to this line of work which requires skilled and expert workmen of the highest class, received and paid for the protection of the patent laws of the United States and made the perfection of this class of instruments their life study and work—and then attracted the attention of The Aœlian Co., and these music publishers to a source (under their contracts) of large monopolistic revenue, and thereupon this court is asked to practically confiscate the large vested interests of our clients and to give force to the iniquitous monoply here proposed.

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This Court construes broadly the doctrine of judicial notice (Brown *v.* Piper, 91 U. S.) and it may therefore be permitted to direct the Court's attention to some facts which, while not in the record, are well settled and known of all men.

Some Statistics.

The number of establishments in the United States engaged in the manufacture of musical instruments is 625 (Bulletin Department of Commerce and Labor); wage-earners, 35,220; yearly wages nearly twenty million dollars; value of products, $69,574,340; and if we include the phonograph in our estimates the amount of capital actually invested in this business in the United States is almost $83,000,000.

Is there any possible resultant benefit to warrant the utter ruin of these large vested interests which would be forced out of business by an unfavorable decision here?

The principle here urged should be taken as adjudicated and not new.

Some definitions of *stare decisis* from recognized authorities and some decisions from various tribunals may not be amiss as tending to show the strong *universal* upholding of this principle in all Courts.

> "Where judicial decisions may fairly be presumed to have entered into the business transactions of a country and have been acted upon as a rule of contracts and property it is the duty of the court, on the principle of *stare decisis*, to adhere to such

decisions without regard to how it might be inclined to decide if the question were new." 11 Cyc. 755.

Citing cases from nineteen States and also Federal cases.

(1898) McCullough *v.* Virginia, 172 U. S. 102,122.

"And this rule obtains, although the court may be of the belief that such decisions are founded upon an erroneous principle and are not sound, for when parties have acted upon such decisions as setted law and rights have been vested thereunder, their inherent correctness or incorrectness in the abstract are of less importance than that rule of property so established should be constant and invariable." 11 Cyc. 755 and 756.

Citing cases from nine States.

"So such a rule controls as to decisions involving questions of * * * the construction and operation of Statute." 11 Cyc. 756.

Citing cases from nineteen States and also Federal cases.

"*Stare decisis* is a name given to the doctrine that, when the court has once laid down a principle of law as applicable to certain state of facts, it will adhere to that principle, and apply it to all future cases where the facts are substantially the same."

Moore *v.* City of Albany, 98 N. Y. 396,410.

The fact that the interests behind these appeals rested upon that decision of twenty years ago and abandoned the appeal to this court, should foreclose them from denying it now, and the decisions below under the circumstances should be held *res adjudicata* here.

Chancellor Kent says:

> "If a decision has been made upon solemn argument and mature deliberation, the presumption is in favor of its correctness; and the community have a right to regard it as a just declaration or exposition of the law, and to regulate their actions and contracts by it." Kent, Comm. 476.

We cannot refrain from quoting this very lucid opinion of Mr. Justice Sanborn, which, while not entirely applicable to this court, yet illustrates the strong help and protection to the business interests of the land which the courts are giving more and more with the years in insisting upon this doctrine:

> "It is a principle of general jurisprudence that courts of concurrent or co-ordinate jurisdiction will follow the deliberate decisions of each other, in order to prevent unseemly conflicts, and to preserve uniformity of decision and harmony of action. This principle is nowhere more firmly established or more implicitly followed than in the circuit courts of the United States. A deliberate decision of a question of law by one of these courts is generally treated as a controlling precedent in every Federal circuit court in the Union, until it is reversed or modified by an appellate court. Striking illustrations of this principle will be found in Vulcanite Co. *v.* Willis, 1 Flip. 388, 393, Fed. Cas. No. 5, 603, in which Judge Emmons said of these courts: 'They constitute a single system; and when one court has fully considered and deliberately decided a question every suggestion of propriety and fit public action demands it should be followed until modified by the appellate court;' Washburn *v.* Gould, 3 Story, 122, 133, Fed. Cas. No. 17, 214; The Chelmsford, 34 Fed. 399, 402, in which Judge Butler said: 'As

respects the claim * * * I should have no hesitation in disallowing it in the absence of authority on the subject. * * * I find however, that the precise question has been decided the other way in The Sarah J. Weed, 2 Lowell, 555 Fed. Cas. No. 12, 350; The Agnes Barton, 26 Fed. 542; and The Huron, 29 Fed. 183. * * * In neither of the cases is the subject discussed at any length, or any adequate reason assigned, in my judgment, for the conclusion reached. So great, however, is the importance I attach to uniformity of decision by courts of co-ordinate jurisdiction, that I feel constrained to adopt the rule thus established in the several districts in which these cases arose. It seems more important that the rule should be uniform and certain than that it should be consistent with principle;' Wells *v.* Navigation Co., 15 Fed. 561, 570; Reed *v.* Railroad Co., 21 Fed. 283; American Wood Paper Co. *v.* Fiber Disintegrating Co., 3 Fish Pat. Cas. 362, Fed. Cas. No. 320; Goodyear *v.* Berry, 3 Fish. Pat. Cas. 439, Fed. Cas. No. 5,556; Machinery Co. *v.* Knox, 39 Fed. 702. In Cole Silver Min. Co. *v.* Virginia & Gold Hill Water Co., 1 Sawy. 685, 689, Fed. Cas. No. 2,990, Mr. Justice Field refused to review the action of the circuit judge, on the ground that such a practice would lead to unseemly conflict. To the same effect are Oglesby *v.* Attrill, 14 Fed. 214, 215; U. S. *v.* Biebusch, 1 McCrary, 42, 43, 1 Fed. 213; Appleton *v.* Smith, 1 Dill, 202, Fed. Cas. No. 498. In U. S. *v.* Biebusch, Judge McCrary declared that it was well settled in this circuit that the rulings of the district judge while holding the circuit court were not subject to be reviewed in the same court, either by the circuit judge or the circuit justice. In Zinsser *v.* Krueger, 45 Fed. 572, 574, Judge Green, while presiding in the circuit court for the district of New Jersey, held that a prior decision of a question of

law by Judge Butler while he was sitting in that court in another case became a precedent to be implicitly followed in that court, unless it clearly appeared that the principles which governed it had been grossly misunderstood or misapplied. Moreover, there are no decisions to which the maxim, 'Stare decisis, et non quieta movere,' applies more universally, or with more salutary effect, than to those which construe statutes that establish or declare rules of property. It is universally conceded that it is often more important that these rules should be certain and changeless than that they should be right. Men engaged in active business buy and sell in reliance upon them. *Lawyers advise their clients and enforce and protect their rights with constant reference to them; and, while all interests will readily adjust themselves to and protect themselves under erroneous rules, there is neither protection nor safety for any interest under shifting rules.* Seale *v.* Mitchell, 5 Cal. 402, 403; Bates *v.* Relyea, 23 Wend. 336, 341; Goodell *v.* Jackson, 20 Johns, 693, 722."

"In view of the principles and authorities to which we have adverted, it is not strange that the plaintiffs in error relied with confidence upon a construction given to the statutes of Colorado by the decision of the circuit court in 1890, and attempted to preserve their right to a new trial in accordance therewith. That decision was delivered by a judge whose opinions command the respect and confidence of lawyers and laymen, and it was an authoritative declaration of the law after careful consideration by a court of high rank. It was apparently the only decision upon the question. According to the concurring opinions and practice of the Federal judges, this decision was a very persuasive, if not a binding, precedent, not only in the circuit court in Colorado, but in all other United

States circuit courts, until reversed or modified by an appellate court. It was a rule of property, a rule to which the doctrine of *stare decisis* is peculiarly applicable, and it was a rule of practice in the court in which this case was pending."

Sanborn J., in Shreve *v.* Cheesman, 69 Fed. 785 at pp. 790, 791 and 792:

"The rule is entitled to great weight where there has been on any point a series of adjudications all to the same effect."

"A rule which, from long acquaintance and implied approval, has become a rule of property, should be overruled only for the most cogent reasons."

"It is the duty of the courts to adhere to it, and leave the corrective to the legislature."

"Where the decision of the State courts have recognized a principle of law for more than twenty years, thereby establishing rules of property, this principle is a binding authority in subsequent decisions."

Lindsay *v.* Lindsay, 47 Ind. 283.
Boon *v.* Bowers, 30 Miss. 246.
Reed *v.* Ownby, 44 Mo. 204.
Kearney *v.* Buttles, 1 Ohio St. 362.
Field *v.* Golbsby, 28 Ala. 218.
Hopkins *v.* McCann, 19 Ill. 113.
Pound *v.* Irwin, 113 Ind. 243.
Paulson *v.* Portland, 16 Or. 450.
Gage *v.* Charleston, 3 S. C. 491.
Minnesota Co. *v.* National Co. 70 U. S. 332.
McVay *v.* Ijams, 27 Ala. 238.
Clark *v.* Troy, 20 Cal. 219.
Cincinnati *v.* Taft, 63 Ohio 141.
Davidson *v.* Beggs, 61 Iowa 309.
Griffin *v.* Creditors, 6 Rob. 225.

And in the late case of Vail *v.* Arizona, decided at this term (28 U. S. 107) Mr. Justice Brewer in delivering the opinion strongly invoked the doctrine of *stare decisis*, saying "it is a wholesome doctrine," and under it held that the question was no longer an open one.

II.

The perforated paper roll is not within the realm of copyright.

It is a mere mechanical adjunct, a "controller" performing mechanical functions only.

The constitution limits copyrights to "writings."

The Statute of Anne limited copyright to "books and other writings."

A perforated paper roll conveys no information in any sense whatever, it is not a "copy" which represents the composition to the eye or to the understanding, is in fact in no sense or manner a copy of anything—it is not a *writing*.

The constitutional word "writings" must be interpreted in the light of how that word must have been understood by the learned men who drafted it and who were acquainted with the Statute of Anne and the decision which had been rendered in England under it.

Prior to the adoption of our Federal constitution in 1787, only one decision had been rendered in an action on a "musical composition" (Bach *v.* Longman, Cowper's Reports page 623) decided by Lord Mansfield in the Court of King's Bench in 1777, holding that the word "writings" in the Statute of Anne covered a "musical composition" represented by musical notation and that a copyright there-

on was infringed by multiplying copies thereof, but not by playing the music represented thereby.

This decision had been published ten years at the time of the constitutional convention and unquestionably was well known to the able and accomplished men there, and in the law of constitutional construction is of course presumed to have been known to the convention.

Automatic or mechanical reproduction of music in various forms was even then well known.

We submit that the framers of the Constitution manifestly did not intend to make copyright cover any such performance of music.

Automatic musical instruments have been in use now 131 years since the Statute of Anne and 121 years since the adoption of our Constitution, and under these facts and under the shadow of an absolutely unbroken line of legal decisions a prescriptive right to the use of such instruments has become vested in the public domain.

III.

The appellant is here to invoke equity, but it comes not with clean hands.

Copyright is entirely statutory, and under all the revealed light in these cases every possible intendment should be given in support of an unbroken line of decisions and the appellant and allied interests should be held to a strict accountability.

Wheaton *v.* Peters, 33 U. S. 591.
Banks *v.* Manchester, 128 U. S. 244.
Bolles *v.* Outing Co., 175 U. S. 268.

It is manifestly very proper to enquire into the *object* or motive underlying the agitation of this question after a slumber of so many years.

The Constitution defines the *object* of this legislation, *to promote the progress of science and the useful arts.*

The great thought of this court is to do justice, and if by reason of the machinations of a party the record does not fully reveal the facts this court is not to be limited to that record (Brown *v.* Piper, supra) but takes judicial notice of such matters in point as are properly so entitled.

The Aeolian Co., a ten million dollar corporation, is the real, actual party in interest. It is paying the expenses, it expressly contracted to force this decision upon this court, it in advance secured exclusive contracts with every music publishing house in the United States of any consequence except two, reserving to itself the absolute control of this perforated paper roll business for thirty-five years, and fearing and anticipating an unfavorable decision here it also provided in its contracts for the same result by legislation.

> Record, pages 345 to 349, 520, 609. Copyright Hearings, Dec. 1907, pages 298 to 306—
> June Hearings, pages 13, 14:

These paper rolls are not adaptable to all instruments, are of use only on those instruments with whose particular mechanism they correspond.

Therefore with an absolute monopoly for thirty-five years in the production and sale of paper rolls, it would be but natural that an equally absolute monopoly on all such instruments for a like period would follow. (Par. 3, page 302, Dec.)

The contract in evidence at page 301 of the December Copyright Hearings contains some interesting provisions. The Aeolian Co. in that contract, termed by them their "Sixty per cent. contract," used the name of the Universal Music Company, one of its numerous nom de plumes, concededly in fact The Aeolian Co. (page 301, Dec).

Paragraph 4, second section, (page 302) provides "That he (the buyer contractor) will not engage in the manufacture of perforated music rolls in any form, either directly or indirectly."

Paragraph 1, same page, provides "That he (the buyer) will not purchase for his own use or for sale, directly or indirectly, or through his branches, any perforated music rolls, except those manufactured by the (Aeolian) company, and that he will not offer for sale, sell, or deal indirectly, or through his branches, any perforated music rolls except those so manufactured by the company."

And paragraph 3, same page, expressly provides that *all instruments* dealt in by these parties must correspond in width, flanges and pins to the Aeolian instruments.

The Aeolian Company's rolls would thus fit all instruments manufactured by 85 per cent. of the trade. And the sale of these rolls alone in the United States amounts to nearly three million dollars a year.

Is the object of all these exclusive contracts in behalf of the Aeolian Co. *to promote the progress of science and the useful arts?*

Men are presumed to intend the natural or inevitable consequences of their acts. They are presumed to have a rational purpose in their doings.

These contracts in question are conceived in a spirit of gigantic monopoly, are harmful and iniquitous in

every aspect, expressly provide for the alternative of legislation if unsuccessful here, and these appeals are maintained in pursuance of such agreement and, as frankly conceded, for the sole and express purpose of giving force thereto.

The court will not aid this scheme to devastate large business interests and exploit them to the advantage of these gentlemen of high finance. Its very insistence is a challenge to American jurisprudence which never has and cannot lend its countenance to the creation, and in this case the perpetuation, of a wrongful conspiracy and combination.

> National Harrow Co. *v.* Quick, 67 Fed. 130.
> National Harrow Co. *v.* Hench, 76 Fed. 667, (and on Appeal, 86 Fed. 36.)
> Worden *v.* Cal. Fig. Syrup Co., 187, U. S. 517.

> "Justice is proverbially blind, but a court cannot, and ought not to, fail to see the patent facts which a record discloses, or to perceive the unavoidable deduction it compels."

It is therefore in an abiding faith that the practice and precept of all courts in all lands in all times past, under which great and useful industries have come to be, and to which strong men have brought the genius of their minds and hands, creating one of the greatest of all industrial lines in this fair land, that we most earnestly urge the unqualified affirmance of the present law under the decisions, that the perforated paper roll is not subject to the realm of copyright.

GEORGE W. POUND,
Counsel.

Correcting Some Misstatements of Law and Fact in Appellant's Brief.

MEMORANDUM ON MISSTATEMENTS IN APPELLANT'S BRIEF.

Page 12.—It quotes Section 4952 as if the words "printing, re-printing, etc.," all related to musical compositions. As a matter of fact this list of words has been added in various statutes as new subjects of copyright were added.

Page 14.—It says that a number of inventors "have stated distinctly that the records can be used directly for playing or singing." There is absolutely no proof of this. The proof is all to the contrary.

Page 15.—It gives the direct testimony of various of their experts to the effect that a perforated roll can be read, but does not give any of the cross-examination in which they all admit that they never heard of it having been read. And the finding by the court was that the overwhelming evidence established that it could *not* be read.

Page 16.—It says that if a roll were filed in the Copyright Office, instead of a sheet of music, the composition itself could be read therefrom. He does not say that the roll itself does not give any key, either by way of template or otherwise, whereby the value of the note can be deduced.

Page 17.—It says the proof is abundant and uncontradicted that perforated notation is used by the public, etc. This is directly contrary to the facts.

Page 18.—It says that in the Office of the Register of Copyrights are found records of copyrights of musical compositions, the filed copies of which were perforated music sheets. He does not say that those rolls were filed by the Aeolian Company for the purposes of this suit. This was one of the strong facts developed in the Dec. Copyright Hearings, the effect of which is seen in the

new bills introduced at this session by Senator Smoot and Chairman Currier.

Page 19.—NOTE PARTICULARLY.—It admits that instruments using perforated sheets were known for many years, although saying they were used only in a small way prior to 1890.

Page 20.—It seems to draw a distinction between a roll and a phonograph disc although his experts contend that they are as much of a "record" (using complainant's term) as a roll. Its distinction seems to be that for the purpose of making a roll, the cutter has the sheet before him and cuts them in order, one slot for each note, whereas in the phonograph disc, the machine itself makes the record which later does the reproducing.

Page 25.—It says that a person sitting at a piano player reads the notes and controls the tempo. He doesn't say that it is the printed marks on the paper which shows the operator how to do that.

Page 47.—It says the performance of these rolls would be a public performance, and therefore the defendant having sold them would be guilty of contributory infringement. The statute to which he refers only interdicts public performances and there is no proof that the rolls in suit were intended to be used at a public performance. There is no proof that they were ever used at all. Also, public performances of musical compositions have been forbidden only since 1897.

Page 57.—It says that it has always been customary in reading all kinds of musical notation, to invoke the assistance of a musical instrument, and that musicians are very scarce who can dispense with such assistance even with staff notation. THERE IS ABSOLUTELY NO PROOF OF THIS ON THE RECORD.

Page 60.—It quotes at length a decision of Judge Colt, subsequent to the *McTammany* case and in the case of Pierce & Bushnell *v.* Wurtmeister, and quotes his language in the latter case as a proof that his point of view had changed since he wrote the McTammany decision. If that is so (which it isn't) the Judge's change of mind was wrong, because the Supreme Court, on December 7th, 1907, in the case of American Tobacco Company *v.* Wurtmeister, expressly disapproved the decision in the Pierce *v.* Bushnell case.

Page 64.—It calls attention to the German decision of 1900 with a great flare, but has little to say about the statute which was immediately passed to overcome that decision.

However, reading that opinion shows that the German statute gave to the composer the exclusive right "to multiply a musical composition MECHANICALLY."

Page 67.—There is a direct misstatement of a most material fact. It says the charge against the Aeolian Company is "unfounded in the proofs OR IN THE FACT." It says also that only five contracts were obtained. Of course it is true that the proofs on the Record do not show the exact number, but there was some evidence of the large number of contracts in existence, the facts were all in possession of the complainant and they remained silent under the charge. The testimony before the Congressional Committees absolutely proves our case, that there were about seventy-five or eighty contracts, and this was frankly admitted at the December hearing by their representative there, and this fact was very strongly found and set forth in the Report of the House Committee on Patents.

Office Supreme Court, U. S.
FILED.
OCT 21 1907
JAMES H. McKENNEY,
Clerk.

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, A. D. 1907.

Nos. 110 and 111.

WHITE-SMITH MUSIC PUBLISHING COMPANY,
Appellant,
vs.
APOLLO COMPANY,
Appellee.

Appeal from the United States Circuit Court of Appeals, Second Circuit.

MOTION TO DISMISS APPEALS
AND
BRIEF IN SUPPORT OF MOTION.

CHARLES S. BURTON,
MUNDAY, EVARTS & ADCOCK,
Of Counsel for Appellee.

Beckman Bros., Law Printers, 358 Dearborn St., Chicago.

OUTLINE AND INDEX OF BRIEF.

1. The suits appealed are for infringement of copyright, the acts charged as infringement consisting in the sale of perforated paper rolls for controlling automatic musical instruments. 3

2. The ground of jurisdiction of the Supreme Court, if any, must be derived under the final clause of Sec. 6 of the Judiciary Act of March 3, 1891, and depends upon the matter in controversy exceeding $1000.00 exclusive of costs. 1–8

3. The value of the matter in controversy is not the value of the copyright. 8–9

4. The only matter in controversy is the defendant's right to make, use or sell the perforated rolls in question, notwithstanding complainant's copyrights sued on; and the value of the said matter comprises:

(*a*) the amount recoverable for past infringement;

(*b*) the value of the privilege sought to be extinguished by injunction. 9–10

5. The collateral effect of the decree cannot be considered. 10–13

6. The matters in controversy in the two suits cannot be aggregated for the jurisdictional amount. 13

7. The record does not show anything as to the amount or value of the matter in controversy. 13–16

8. In such case, affidavits are admissible to show such amount or value. 16–18

9. The affidavits establish:

(*a*) The profits recoverable, if complainant prevails, amount to an insignificant sum—less than $10.00. 18–19

(*b*) The privilege sought to be extinguished by injunction is of absolutely no value, because salability of the subject-matter is exhausted. 19

(*c*) The value of such privilege from the beginning to the end was not worth any more than a nominal sum—less than $10.00. 19

10. Counter affidavits considered. 21–24

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, A. D. 1907.

No. 110 (and No. 111).

WHITE-SMITH MUSIC PUBLISHING COMPANY, Appellant, vs. **APOLLO COMPANY,** Appellee.	Appeal from the United States Circuit Court of Appeals, Second Circuit

Motion to Dismiss Appeal.

Comes now the appellee Apollo Company, and moves the court to dismiss the appeal in this case for want of jurisdiction, because the matter in dispute, exclusive of costs, in said case does not exceed the sum or value of one thousand dollars ($1000).

And forasmuch as the record in said case contains nothing showing or tending to show or indicate the sum or value of the matter in dispute, the said appellee craves leave to file the accompanying affidavits of E. G. Clark, A. N. Page, E. B. Bartlett, Adolf Janson, Fred Kann, W. F. Wallace and G. H. Davis tending to show said sum or value, together with proof of service of copies of the same upon appellant's counsel.

CHARLES S. BURTON,

Counsel for Appellee for the Purposes of this Motion.

To GIFFORD & BULL,

141 Broadway, New York City.

Please take notice that on Monday, the 21st day of October, A. D. 1907, the motion of which the foregoing is a copy will be submitted to the Supreme Court of the United States, together with the affidavits therein mentioned, for the decision of the court thereon.

Annexed hereto is a copy of my brief or argument in support of said motion.

CHARLES S. BURTON,

Counsel for Appellee for the Purposes of this Motion.

Received copy of the foregoing motion and of the affidavits and brief or argument in support of same.

LIVINGSTON GIFFORD,

Of Counsel for Appellant.

NEW YORK CITY, Sept. 24, 1907.

IN THE SUPREME COURT OF THE UNITED STATES.

October Term, A. D. 1907.

Nos. 110 and 111.

White-Smith Music Publishing Company,
Appellant,
vs.
Apollo Company,
Appellee.

Appeal from the United States Circuit Court of Appeals, Second Circuit.

Motion to Dismiss said Appeals.

Brief of Appellee on Said Motion to Dismiss Appeals.

To the Hon. Judges of the Supreme Court of the United States:—

These are suits in equity for infringement of copyrights on certain musical compositions entitled respectively, "Little Cotton Dolly" (No. 110) and "Kentucky Babe Schottische" (No. 111). The acts complained of as alleged infringement consist in the sale of sheets or rolls of perforated paper commonly called "perforated rolls" or "music rolls" used for controlling automatic musical instruments to cause them automatically to play the music in question.

See Bills of Complaint, pp. 1-3 and 17-20, and Complainant's Exhibits (erroneously indexed *"Defendant's"* Exhibits), "No. 12, Music Rolls."

I.

The sole source at present of jurisdiction of the Supreme Court to entertain this appeal is the Act of March 3, 1891, creating the Circuit Court of Appeals and distributing appellate jurisdiction.

The Acts relating to the subject are:

(*a*) Sec. 692 (Act of June 30, 1864), fixing the jurisdictional limit at two thousand dollars in equity causes.

(*b*) Sec. 699 (Act of July 8, 1870), removing the pecuniary limit of jurisdiction in appeal from "any final judgment at law or final decree in equity in any case touching patent rights or copyrights."

(*c*) Section 3 (Act of April 16, 1875), raising the jurisdictional amount named in Sec. 692 from two thousand dollars to five thousand dollars.

(*d*) Act of March 3, 1891, creating Circuit Court of Appeals, which in Section 4 provides—

> "the review by appeal, writ of error or otherwise from the existing Circuit Courts shall be had only in the Supreme Court of United States or in the Circuit Court of Appeals hereby established according to the provisions of this Act regulating the same."

And in Section 5 provides—

> "that appeals or writs of error may be taken from the district courts or from the existing Circuits Courts directly to the Supreme Court"—in certain cases recited which do not include copyright cases.

And in Section 6 provides that—

> "the Circuit Court of Appeals established by this Act shall exercise appellate jurisdiction to review by appeal or writ of error final decision of the district courts and the existing circuit courts in all cases other than those provided for in the preceding section of this Act, unless otherwise provided for by law, and the judgments or decrees of the circuit courts of appeals shall be final."—
>
> (*a*) in all cases in which jurisdiction is dependent upon diversity of citizenship;
>
> (*b*) in all cases arising under the patent laws, under the revenue laws and under the criminal laws;
>
> (*c*) in admiralty cases.
>
> (The remainder of the paragraph provides for the Circuit Court of Appeals obtaining instructions from the Supreme Court upon questions or propositions of law sub-

mitted, and the next paragraph provides for review upon certiorari.)

The section concludes:

> "In all cases not hereinbefore in this section made final, there shall be of right an appeal or writ of error or review of the case in the Supreme Court of the United States, where the matter in controversy exceeds $1000.00 beside costs, but no such appeal shall be taken or writ of error sued out unless within one year after the entry of the order, judgment or decree sought to be reviewed."

Section 14 provides that—

> "All acts or parts of acts relating to appeals or writs of error inconsistent with the provisions for review by appeals or writs of error in the preceding sections 5 and 6 of this act are hereby canceled."

The Act of March 3, 1891, repealed entirely Sec. 692 of Revised Statutes (Act of June 30, 1864) (as amended by Sec. 3 of the Act of Feb. 16, 1875, raising the jurisdictional amount to $5000.00); and also repealed Section 699 which removed the pecuniary limit of jurisdiction on appeal in patent and copyright cases; and **"any final judgment at law or final decree in equity in a case touching copyrights"** is no longer subject to appeal without regard to the amount in controversy; but such cases fall under the last paragraph of Sec. 6 of said Act of March 3, 1891, being included in **"cases not hereinbefore in this section made final,"** and being therefore appealable only **"where the matter in controversy shall exceed $1,000.00 beside costs;"** for—

(*a*) "Where two acts are not in all respects repugnant, if the later act covers the whole subject of the earlier and embraces new provisions which plainly show that the last was intended as a substitute for the first, it will operate as a repeal."

United States v. *Tynen*, 78 U. S., 92;

King v. *Cornell*, 106 U. S., 395.

(*b*) The Act of March 3, 1891, was intended to relieve the

Supreme Court of over-burden of litigation and to re-distribute between that court and the Circuit Court of Appeals created by the Act the entire appellate jurisdiction and to cover the whole subject.

Ex parte Lau Ow Bew, 141 U. S., 583;
McLish v. *Roff*, 141 U. S., 661;
Wood v. *Lovejoy*, 143 U. S., 202;
Lau Ow Bew v. *United States*, 144 U. S., 47;
Hubbard v. *Soby*, 146 U. S., 56;
American Constr. Co. v. *Jacksonville T. & K. W. R. Co.*, 148 U. S., 372;
Ex parte Lennon, 150 U. S., 393;
Frost v. *Wenie*, 157 U. S., 46;
United States v. *American Bell Tel. Co.*, 159 U. S., 548.
United States v. *Healy*, 160 U. S., 136;
Kirwin v. *Murphy*, 170 U. S., 205;
Le Paquette Habana, 175 U. S., 697.

In *ex parte Lau Ow Bew*, 141 U. S., 583, it was held—

> "that the jurisdiction of the Supreme Court to review the judgment of the Circuit Court of Appeals should be exercised sparingly."

In *McLish* v. *Roff*, 141 U. S., 661, the court said, referring to the Act of March 3, 1891, creating the Circuit Court of Appeals:

> "It is a matter of public history, and is manifest on the face of that Act, that its primary object was to facilitate the prompt disposition of cases in the Supreme Court and to relieve it of the enormous over-burden of suits and cases resulting from the rapid growth of the country and the steady increase of its litigations. That Act, in substance, creates a new and distinct Circuit Court of Appeals, in each circuit. . . . It then provides for the distribution of the entire appellate jurisdiction of our national judicial system, between the Supreme Court of the United States and the Circuit Court of Appeals, there-

in established, by designating the classes of cases in respect of which each of those two courts shall respectively have final jurisdiction."

In *Lau Ow Bew* v. *United States*, 144 U. S. 47, opinion by Chief Justice Fuller, again discussing the Act of March 3, 1891, quoting several sections, concludes:

> "The appellate jurisdiction not vested in this court was thus vested in the court created by the Act and the entire jurisdiction distributed" (citing *McLish* v. *Roff*).
>
> "The words, **'unless otherwise provided for by law,'*** were manifestly inserted out of abundant caution, in order that any qualification of the jurisdiction by contemporaneous or subsequent acts should not be construed as taking it away, except when expressly so provided. . . . To hold that the words referred to prior laws would defeat the purpose of the Act and be inconsistent with its context and its repealing clause."

Continuing, referring to Sec. 6, Chief Justice Fuller says:

> "By this section, judgments or decrees in the enumerated classes of cases are made final in terms by way of the exclusion of any review by writ of error or appeal, while as to cases not expressly made final by the section, appeal or writ of error may be had of right, where the money value of the matter in controversy exceeds $1000.00 beside costs."

American Construction Co. v. *Jacksonville T. & K. W. R. Co.* substantially repeats the language of *McLish* v. *Roff*, citing the same and *ex parte Lau Ow Bew* and *Lau Ow Bew* v. *United States, supra*, and adds (p. 382):

> "The Act has uniformly been so construed and applied by this court as to promote its general purpose of lessening the burden of litigation in this court, transferring the appellate jurisdiction in large classes of cases to the Circuit Court of Appeals, and making the judgments of that court final, except in extraordinary cases."

This decision also (p. 383) reaffirms the conclusion above

* In quotations all typographic display for emphasis or distinction is our own, unless specially otherwise indicated.

quoted from *Lau Ow Bew* v. *United States*, that the language of Sec. 6, "unless otherwise provided for by law,"

> "looks only to provisions of the same Act, or to contemporaneous or subsequent acts expressly providing otherwise, and does not include provisions of earlier statutes."

Ex parte Lennon reaffirms the same conclusion.

A dictum in *Durham* v. *Seymour*, 161 U. S., 235, interprets the above decisions as applying directly to Section 699 of the Revised Statutes of 1878, and as indicating that this court regards that section as repealed by the Act of March 3, 1891.

This was a suit to compel the issue of a patent to an applicant for the same, and reached the Supreme Court by appeal from the United States Circuit Court of Appeals of the District of Columbia. Dismissing the appeal (upon grounds not material to the present point), the court had occasion to distinguish from former apparently similar cases in which jurisdiction has been taken, saying (pp. 239-240):

> "But *Morgan* v. *Daniels* and *Hill* v. *Wooster* were appeals from the Circuit Courts taken before the passage of the judiciary act of March 3, 1891, and when U. S. Revised Statutes 699, was in force, which allowed appeals from those courts irrespective of the sum or value of the matter in dispute in cases touching patent rights."

II.

The matter in actual controversy in this suit upon the value of which depends the jurisdiction of the Supreme Court to entertain this appeal is **not the copyright;** for

1. No contest appears anywhere in the record with respect to the formal existence or validity of the copyright;

2. The decree from which the appeal is taken does not contain any findings adverse to the existence, or validity of, or complainant's title to the copyright;

3. The assignments of error to this court do not allege any error of the court below in any finding, opinion or decree of

that court with respect to the existence, validity or title of the complainant to the copyright sued on.

The formal finding and decree of the Circuit Court affirmed by the Circuit Court of Appeals is merely

> "that there is no equity in the complainant's bill of complaint," and
> "that said bill of complaint herein be and the same is hereby dismissed for want of equity."

And the conclusion of the court upon which this formal decree rests is in the following language (Record, p. 476):

> "My conclusion is that the defendant in making, using and vending the perforated music rolls which reproduce the musical pieces, 'Little Cotton Dolly' and 'Kentucky Babe Schottische,' for which copyrights were granted, did not violate the equitable rights of the complainant as sole proprietor."

The conclusion of the Circuit Court of Appeals, on which is based the affirmation of the decree of the Circuit Court, is summed up in the following language (Record, page 490):

> "We are therefore of the opinion that a perforated paper roll such as is manufactured by the defendant is not a copy of complainant's staff notation."

These quoted statements of the conclusions of the Circuit Court and of the Circuit Court of Appeals respectively, as the basis for the dismissal and the affirmation of the dismissal of the bill of complaint for want of equity express the whole subject-matter litigated between the parties, and exclude from the controversy all questions of the existence, validity or ownership of the copyright, which the Circuit Court expressly finds in the complainant.

The subject-matter of the controversy which is expressed negatively in the above-quoted findings of the court below, expressed affirmatively, is seen to be—

The right of the defendant, Apollo Company of New York, to take, use or sell the perforated rolls for the

pieces of music involved in the two suits respectively, notwithstanding the complainant's copyrights sued on.

The value of this matter in controversy is made up of two elements corresponding to the two remedies sought, viz.:

1. The remedy by way of recovery of profits derived by the defendant on account of the making, using or selling of such rolls by the defendant;

2. The remedy by way of injunction preventing the defendant hereafter making, using or selling such perforated rolls.

The total sum or value in controversy is therefore the sum of—

(*a*) The amount which could be recovered by the complainant on account of profits of the past alleged infringement consisting in the defendant's making, using and selling such perforated rolls;

(*b*) The value to the defendant company of the privilege from which it would be restrained by the injunction, of making, selling and using such rolls in the future to the end of the copyright period (which value must be identical with the abatement of the value to the complainant of its alleged exclusive right to make, use and sell such rolls which would be caused by the permitted exercise by the defendant of the rights contended for by it).

III.
Collateral effect of decree cannot be considered.

That the copyright value is not the sum or value in controversy merely because the existence and the validity of the copyright and the complainant's ownership thereof must be averred and established as a foundation for the recovery and injunction sought, and that such copyright value would not be the sum or value in controversy, even if the existence, validity or complainant's title were contested, or even if the decree

appealed from had found adversely to the existence and validity of the copyrigiht or to the complainant's title thereto, see the following:

Elgin v. *Marshal*, 106 U. S., 578. This was a suit to recover interest on municipal bonds, the defense being the invalidity of the issue, and the question litigated being the validity of the entire principal of the bonds. Nevertheless, the court held that the amount of interest sued for, and not the amount of the principal of the bonds, must determine the jurisdiction, and this notwithstanding the conclusion reached as to the validity or invalidity of the bonds might be conclusive in a suit upon the bonds for recovery of the principal, the court saying:

> "The matter which is directly in dispute in the particular cause in which the judgment or decree sought to be reviewed has been rendered is that upon which jurisdiction depends, and the court is not permitted for the purpose of determining its sum or value to estimate its collateral effect in a subsequent suit between the same or other parties."

To the same effect see—

City of Opelika v. *Daniel*, 109 U. S., 108;
Bruce v. *Manchester & Keene R. R.*, 117 U. S., 514;
Starin v. *Schooner Jessie Williamson*, 108 U. S., 305;
Bowman v. *Chicago & N. W. Ry.*, 115 U. S., 611;
Gibson v. *Shufeldt*, 122 U. S., 27;
Steam Canal Boat Sidney v. *B. W. Ins. Co.*, 139 U. S., 331.

Similarly, in *Colvin* v. *City of Jacksonville*, 158 U. S., 456, suit being by an individual tax payer to enjoin the issue of bonds by municipality on the grounds of unconstitutionality, the court held that the amount in controversy was the amount of taxes the individual complainant would have to pay for interest in the sinking fund if the bonds were issued, and not the amount of the proposed issue.

Similarly, also, in *El Paso Water Co.* v. *City of El Paso*, 152 U. S., 157, being a suit by the Water Company to enjoin

the City from establishing competing water works, held that the jurisdictional amount is not the cost of the water works, but the amount of taxes, other expenses and damages to which the complainant would be subjected by the establishment of such competing water works.

In *New England Mortgage Security Co.* v. *Gay*, 145 U. S., 123; action for debt; defense on the ground of usury, in the State of Georgia where by statute usury avoids all title to land given as security, records showing such security, *held* that although the title to the land was in fact involved as a conclusion of law in the judgment rendered, the value of the land is not the amount in controversy for the purpose of giving jurisdiction, but only the amount of the usury.

City of Clay Center v. *Farmers Loan & Trust Co.*, 145 U. S., 224; suit to recover rentals due; defense, invalidity of the contract. The contract covered a definite period in which the total rentals exceeded the jurisdictional amount; held that the Supreme Court had no jurisdiction because the rentals actually due and for which judgment was rendered fell short of the jurisdictional amount, and this notwithstanding the question litigated was the validity of the contract, and the validity, therefore, of the obligation for the rentals for the entire period.

New Jersey Zinc Company v. *Trotter*, 108 U. S., 564; suit brought for value of ore taken in alleged trespass; claim by the defendant of ownership of ground on which trespass was alleged. The question involved and the matter actually litigated was therefore the title or ownership of the ground. Title being found in the complainant, judgment for the value of the ore taken in trespass being less than the jurisdictional amount, *held* that the Supreme Court had no jurisdiction on appeal, such jurisdiction not being supportable on the basis of the value of the ground or the title thereto.

In *Vicksburg S. & P. R. R.* v. *Smith*, 135 U. S., 195, suit was brought to obtain possession of a certain portion of a larger tract of land. Both complainants and defendants

claimed title to the entire larger portion and the judgment in respect to the smaller portion sued for involved determination of the ownership of the entire tract. Nevertheless, the Supreme Court held that the amount or value in controversy was the value of the particular tract sued for, and not the value of the larger tract litigated about.

IV.
Each suit must stand alone.

The amounts involved in the two suits which were heard together cannot be aggregated for the purpose of making a jurisdictional amount, but jurisdiction in each suit must rest upon the sum or value involved in that suit alone.

Walter v. *Northwestern R. R. Co.*, 147 U. S., 370 (and cases cited therein;
Elgin v. *Marshall*, 106 U. S., 578;
Chamberlin v. *Browning*, 177 U. S., 605;
Starin v. *The Jessie Williamson*, 108 U. S., 305;
Russell v. *Stansell*, 105 U. S., 303.

V.
The record does not show the value in controversy.

1. If as contended by the complainant, the exclusive right to make and sell these perforated rolls is included in the copyright, it is at most only a *part* (and it may be a very small part in value) of the whole copyright.

2. And in particular, the right which this defendant claims to make and sell these perforated rolls is not the whole even of the exclusive right which the complainant asserts with respect to these rolls under its copyright; for in order to involve that whole exclusive right, it must *all* be claimed by *each* party. When one party claims all this exclusive right and the other party claims only a *non-exclusive* right, the sum or value in controversy is only the amount by which the value of the

exclusive right claimed by one is diminished by carving out of it the non-exclusive right claimed by the other; or, in other words, the injury to the exclusive right caused by permitting the exercise of the non-exclusive right.

The bill of complaint contains (Record, pp. 2 and 18, clause 6. of Bills of Complaint) averments as to the value of the entire copyright, and the complainant offered some proof (Record, pp. 6-7 "Little Cotton Dolly," and pp. 24-28 "Kentucky Babe Schottische") tending to show this value, but the only effect of these averments and proof sustaining them is to show that the value of the matter in controversy *cannot exceed* the amount averred or proven as the value of the whole copyright (as the part cannot be greater than the whole). But there is neither averment nor proof in the record tending in any respect to show what portion of the whole value of the copyright is the value of the exclusive right of making and selling the perforated rolls, if that value is included in the copyright.

Nor is there anywhere in the record averment or proof by which the court might be in any respect assisted in ascertaining *how much* the entire value of *that part* of the copyright (if it is a part) consisting in the exclusive right to make and sell the perforated rolls in question would be diminished by the permitted exercise of the *non-exclusive* right to make such rolls claimed by the defendant.

The bill of complaint contains no averment or charge as to damages sustained by complainant on account of the alleged infringement, and contains only the following unpositive suggestion and "charge" as to the amount of profits derived by the defendant from its alleged infringement, to wit:

> "8. That your orator cannot with certainty state the exact amount of profits by the defendant aforesaid sought to be diverted to itself, but believes the same to be the full sum of Five Thousand Dollars ($5000.00) and so charges the fact to be, and prays that said defendant may

> full and true disclosures make as to the sum and may be decreed to account therefor in full."

There is not in the record a scintilla of proof as to the actual or probable profits made by the defendant by reason of the alleged infringement, nor was any proof offered by the complainant bearing upon the above quoted charge of the bill.

Such unpositive suggestion, unsupported by evidence of any sort, does not afford any ground from which the court might even infer the existence of the jurisdictional amount in controversy.

Washington & G. R. R. Co. v. *District of Columbia*, 146 U. S., 227. This was a suit in equity to enjoin collection of certain license tax on street cars. The bill alleged refusal to pay since 1876, and that (p. 239)—

> "The amount which would probably be computed and charged against the complainant by said municipal authorities would reach nearly, if not quite, the sum of Fifty-two Hundred Dollars ($5200.00)."
>
> (The jurisdictional amount in such cases at that time was $5000.00.)

The total amount of the tax between 1876 and the time of filing the bill was not disclosed in the record. The Supreme Court held that the averment in the language above quoted, not being supplemented by evidence clearly making out the jurisdictional amount, was not sufficient to establish the jurisdiction of the Supreme Court, and the bill was dismissed for want of jurisdiction.

But mere averments in the pleadings, however definite, if evidently made only for the purpose of suggesting jurisdiction and not necessary for any other purpose, are unavailing for giving or showing jurisdiction when entirely unsupported by proof.

The burden is on the appellant to establish by preponderance of proof the jurisdictional amount.

Wilson v. *Blair*, 119 U. S., 387;
Red River Cattle Co. v. *Needham*, 137 U. S., 632.

In *Lee* v. *Watson*, 68 U. S., 537, Justice Field, delivering the opinion of the court, recites the facts and conclusions thus:

> "The writ and original declaration in the case showed that the amount in controversy did not exceed One Thousand Dollars (1000.00); and the evidence offered by the plaintiffs at the trial showed that it did not exceed Seven Hundred Dollars ($700.00); and that in the progress of the cause an amendment was made in the amount of the damages claimed, for the purpose of bringing the case within the appellate jurisdiction of this Court. It is hardly necessary to add that, upon the facts thus stated, the Court will not entertain jurisdiction of the case."

See also:

Shacker v. *Hartford Fire Ins. Co.*, 93 U. S., 241;

Hilton v. *Dickinson*, 108 U. S., 165;

Gray v. *Blanchard*, 97 U. S., 564;

Tintsman v. *National Bank*, 100 U. S., 6;

Banking Association v. *Ins. Association*, 102 U. S., 121.

In *Shunk* v. *Moline M. S. Co.*, 147 U. S., 500, the court said (p. 505):

> "It may be laid down as a general proposition that no mere pretense as to the amount in dispute will avail to create jurisdiction."

VI.

Where the value of the matter in controversy is not necessarily put in issue in the pleadings, as where the matter involved is the right of possession of specific real or personal property, and the record does not disclose this value, such value may be shown by affidavits, either supplemental to the record transmitted from the court below, or by affidavits filed after the record reaches this court (provided there has been in the court below no contest over the matter of value by affidavits or otherwise, and no finding by the court below).

Elgin v. *Marshall*, 106 U. S., 578;

Whiteside v. *Haselton*, 110 U. S., 296;

Wilson v. *Blair*, 119 U. S., 387;

Red River Cattle Co. v. *Needham*, 137 U. S., 632;
Rector v. *Lipscomb*, 141 U. S., 557;
Carr v. *Fife*, 156 U. S., 494;
United States v. *Trans-Missouri Freight Assn.*, 166 U. S., 310;
Chesapeake Beach R. R. Co. v. *Washington P. & C. R. R. Co.*, 199 U. S., 248.

This is a matter so strictly concerning the usage of this court that we forbear to call attention to the particular language of these decisions, except in one or two of the later cases.

In *Rector* v. *Lipscomb*, Justice Brewer, in rendering the decision of the court, and reviewing the practice in this respect, took occasion to say:

> "when we are fully satisfied that the amount in controversy is not sufficient to give us jurisdiction we ought not to attempt an inquiry into the merits of the case which is sought to be appealed. Unless we exercise a supervising power over these matters, many cases may be thrust upon our consideration through inattention of the trial court or the mistake or wrong of the defeated party which are not, in fact, within our jurisdiction. . . . Under the circumstances it would be sacrificing substance to form, and assuming a jurisdiction which we do not have, to hold that because this testimony did not get before the trial court in time for its primary action, it must be wholly ignored by us."

In *United States* v. *Trans-Missouri Freight Association* (p. 310), Justice Peckham, rendering the decision, took occasion to say:

> "The statutory amount must, as a matter of fact, be in controversy, yet that fact may appear by affidavits after the appeal is taken to this court." (Citing *Whiteside* v. *Haselton*, and *Red River Cattle Co.* v. *Needham*, *supra*.)

In the very latest case which we find—*Chesapeake Co.* v. *Washington P. & C. R. R. Co.*, above—it appears that, although there was evidence in the record bearing upon the

the value to the appellee of such privilege, or to the appellant of restraining the appellee from the exercise of such privilege, is now absolutely nothing.

(Affidavits of E. G. Clark, A. N. Page, E. B. Bartlett, Adolf Janson, G. Howlett Davis and W. F. Wallace.)

It is submitted, therefore, that the affidavits establish:

(*a*) That the total or maximum possible amount of that part of element of the sum or value of the matter in dispute which consists in the profits to which the appellant will be entitled to recover from the appellee, Apollo Company, on account of the sales of the rolls in question, in the case of "Kentucky Babe Schottische" is not more than some proper fraction of $3.60, and in the case of "Little Cotton Dolly" is not more than a like proper fraction of $14.40, these sums being the total retail value of the entire number of rolls sold in the two cases respectively (and for the present purpose it is obviously not necessary to consider what proportion of said selling price is profit); and

(*b*) That inasmuch as the salability of said perforated music rolls for both said pieces has long since ceased without any reasonable expectation of revival, the total possible abatement from the value of the monopoly of selling such rolls claimed by the appellant, which is identical with the value of the unrestricted privilege claimed by the appellee of also selling such rolls, has already been experienced, and therefore that element of the sum or value of the matter in dispute which consists in the value to the appellant of the remedy by injunction restraining the further sale of said rolls by the appellee, **is no sum whatever which this court can estimate or consider.**

And that the total sum or value of the matter in dispute, including both said elements, is the insignificant amount which might upon scrutiny be found to be the profits recoverable

on the insignificant sales by the appellee of said rolls respectively.

[NOTE: It will be evident that, even if these suits were directed against the manufacturer of the rolls in question, so that the entire output, throughout the world, of said rolls could be taken into consideration, the first element of the sum or value of the matter in controversy —the profits recoverable—would still be an insignificant amount, not exceeding in respect to "Kentucky Babe Schottische" some proper fraction of the aggregate sales, which amounted to less than forty dollars ($40.00), and in respect to "Little Cotton Dolly" some like proper fraction of the aggregate sales, which also amounted to less than forty dollars ($40.00); and that the second element of said sum or value in dispute would, in the case of the manufacturer, as in the case of the retail dealer, be absolutely nothing, either upon the basis of the value of the present expectation of future sales (the pieces being "dead"), or upon the basis of any value which might have been estimated in advance on the basis of probable sales during the period of salability, or upon the basis of any price which would not have been commercially prohibitive.]

The appeals should therefore be dismissed for lack of jurisdiction, because the sum or value in dispute is less than one thousand dollars ($1000.00).

Respectfully submitted,

CHAS. S. BURTON,

MUNDAY, EVARTS & ADCOCK,

Of Counsel for Appellee.

In Reply to Appellant's Counter Affidavits.

The affidavits of Davidson and Bacon, filed by appellants since the foregoing was in print, contain no statements of fact tending in any respect to controvert the explicit statements of material facts as to (*a*) amount of sales, (*b*) margin of profits, (*c*) period of salability of the perforated rolls in question as having long since terminated, (*d*) maximum value at any time

of the privilege sought to be extinguished by injunction, of making and selling such perforated rolls, which are contained in the affidavits of Clark, Bartlett, Page, Janson, Kann, Wallace and Davis.

The statements of these affiants stand therefore absolutely uncontradicted.

To the suggestion contained in the affidavits of Davidson and Bacon of pecuniary interest on the part of appellee's affiants in the issue, and their prejudice on that account, it may be replied that the facts to be shown are such as could not be within the conclusive knowledge of any except persons engaged in the business of handling such perforated rolls; and that every person so engaged must be, at least to the same extent as these affiants, pecuniarily interested or liable to be prejudiced by their interest on one side or the other; and that as to the specific facts touching the sales by the defendant, these affiants have set out the records of the defendant and of the manufacturer by which it was supplied with such rolls in detail and that there is no room for prejudice to modify the showing made by the records; and only by deliberate and easily provable perjury of each of these clients could any false showing of the facts in this regard be made. And nothing in the counter affidavits raises any question of or casts any shadow upon the veracity or credibility of these affiants.

That so far as the affidavits deal with the matter of the value of the privilege sought to be extinguished by injunction, (*a*) as having been at no time greater than a nominal sum (less than $10) and (*b*) as being now conclusively nothing whatever by reason of the long-since-extinct salability of the rolls in question, if the appellee's affiants might by reason of supposed prejudice be suspected of having colored or exaggerated or distorted the facts, the appellant is shown by the record to be in position to obtain the affidavits of a much larger number of persons connected with concerns in like position of vantage with these affiants and who, being pe-

uliarly friendly to the appellant, could, if the facts in their ossession warranted, contradict the appellee's affiants as to ach of these material classes of facts,—

(*a*) The short life of the salability, in general, of per.o-ated rolls for popular music.

(*b*) The termination in fact long ago of the salability of ne particular perforated rolls in question.

(*c*) The slight and really nominal value at any time of the rivilege sought to be extinguished by injunction of making nd selling perforated rolls for any particular piece of popular nusic of which the perforated rolls have average salability.

For the Aeolian Company, confessedly the real complainant n these suits, is also confessedly by very far the largest maker nd seller of such perforated rolls (printed record, p. 349, l. -9; p. 487, par. 7); and the Wilcox & White Company, prob-bly the next largest seller of such rolls, is openly and vowedly friendly to the complainant, as is shown in the rec-rds by the voluntary testimony on complainant's behalf of Mr. James H. White, president and treasurer of said company. Record, p. 60.) And the officers and the employees of these wo companies are in the best possible position either to con-irm or to contradict the statements of the appellee's affiants upon these three material points.

That there is no affidavit of any officer or employee of either of these companies, or of any one, denying or questioning the ruth or correctness of the statements of appellee's affiants in hese respects, is tantamount to an admission of the truth and orrectness of their said statements.

In lieu of any attempt at meeting the statements of fact con-ained in the appellee's affidavits, the counter affidavits of Da-idson and Bacon contain substantially only the following:

1. Statement of *belief* of the affiants as to the amount of ecovery to which the complainant might be entitled upon ac-ounting, *without any statement, or suggestion even, of the grounds of such belief, or any facts upon which it rests.*

2. Statement (by Davidson) that the copyrighted musical composition in question (published and sold in sheet form by the complainant) still continue popular and salable in the form published by said complainants.

This statement is entirely irrelevant and immaterial. It is not responsive to any statement contained in the affidavits on behalf of appellee touching the short life of salability and the long-since-extinct salability of the *perforated rolls* for playing the pieces in question. If it was assumed that it might be inferred that continued salability of the *sheet music* would indicate continued salability of the *perforated rolls*, there is absolutely nothing to warrant the inference; and to the contrary are the very express statements by the affiants of the appellee, both to the general fact that the sale of perforated rolls of popular music is short-lived, and to the specific fact that the sale of perforated rolls for these particular pieces *ceased three years or more ago* and is extinct at present. Putting these statements of fact against the silence of the appellants, who are in such remarkably good position for knowing whether this is true or not and for producing affidavits in accordance with their knowledge, the mere averment that the said publication of the appellants (sheet music) continues to sell, should be treated as irrelevant and immaterial.

Respectfully submitted,

CHAS. S. BURTON,

MUNDAY, EVARTS & ADCOCK,

Of Counsel for Appellee.

Office Supreme Court, U. S.
FILED.
OCT 21 1907
JAMES H. McKENNEY,
Clerk.

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, A. D. 1907.

Nos. 110 and 111.

WHITE-SMITH MUSIC PUBLISHING COMPANY,
Appellant,
vs.
APOLLO COMPANY,
Appellee.

Appeal from the United States Circuit Court of Appeals, Second Circuit

AFFIDAVIT BOOK.

CHARLES S. BURTON,
MUNDAY, EVARTS & ADCOCK,
Of Counsel for Appellee.

Rogers Bros., Law Printers, 358 Dearborn St., Chicago.

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, A. D. 1907.

No. 110 and 111.

WHITE-SMITH MUSIC PUBLISHING COMPANY, Appellant, vs. **APOLLO COMPANY,** Appellee.	Appeal from the United States Circuit Court of Appeals, Second Circuit

MESSRS. GIFFORD & BULL,

141 Broadway, New York, Counsel for Appellant.

Gentlemen:—

You are handed herewith copies of affidavits by E. B. Bartlett (2), A. N. Page (2), Adolf Janson and Fred Kann, which you are hereby notified we shall ask leave of court to file, and which, together with any counter affidavits filed on behalf of the appellant we shall ask the court to consider in connection with motions to dismiss the appeals in both said suits which will be hereafter entered for an early motion day in the coming October term of said court.

CHAS. S. BURTON,
Of Counsel for Appellee.

Received above notice and copies of affidavits therein mentioned at New York City, this 17th day of September, 1907.

GIFFORD & BULL,
W. A. PAULING.

IN THE SUPREME COURT OF THE UNITED STATES.

October Term, A. D. 1907.

No. 111.

White-Smith Music Publishing Company,
Appellant,
vs.
Apollo Company,
Appellee.

Appeal from the United States Circuit Court of Appeals, Second Circuit.

State of Illinois, County of Cook, ss.

E. B. BARTLETT, being first duly sworn, deposes and says that he is the secretary of the W. W. Kimball Company, which is engaged in the manufacture of musical instruments at Chicago, Illinois; that one department of the business of said company consists in the manufacture and sale of automatic musical instruments and piano-players and in the manufacture and sale of perforated controller sheets or rolls for such instruments; that in his capacity as the secretary of said company he has been obliged to become, and has become, familiar with all phases of the business of making and marketing such perforated controller sheets, commonly called perforated rolls or music rolls, and is familiar both with the cost of production and with the prices obtained for such rolls and with the conditions of the business which affect the profit obtainable on such rolls and the value of the right or privilege of making such rolls for musical compositions of various classes.

Affiant further says that he is acquainted with the musical composition entitled "Kentucky Babe Schottische" and with the perforated rolls for producing the same upon automatic musical instruments, which are the subject-matter of this suit.

This affiant further says that there is no custom or usage of the business by reference to which the value of said right or

privilege with respect to any particular composition could be calculated; that except as to an occasional rare and exceptionally popular composition, or one which has been exploited by public performance and other means of advertising, composers generally are willing to have perforated rolls for playing their compositions made without any compensation to them for the privilege, and makers of such perforated rolls can at all times have a full supply of such popular music for their catalogues without compensation, because composers generally are desirous of having their music exploited by means of automatic instruments using such perforated rolls.

This affiant further says that the said composition of "Kentucky Babe Schottische" is not an exceptional composition in respect to popularity for automatic playing, but belongs to the class mentioned, of ordinary or average popularity in this respect, and of which an abundant supply is at all times available for perforated roll purposes without compensation for the privilege of making or selling same.

This affiant further says that the average worth or value to a maker of such perforated rolls, of the right or privilege of making and selling same—that is to say, the value of such right with respect to the average musical composition, or one having average popularity, and of which the perforated rolls would have average salability—is a very small amount, and in fact is substantially nominal only, and this affiant says that ten dollars ($10) is more than the value of such right with respect to the average musical composition of the class to which "Kentucky Babe Schottische" belongs, and that if it were necessary for makers of perforated rolls to pay an average price of ten dollars ($10) for such right, the entire profits of the business would be extinguished, and that price, on an average, would therefore be prohibitive. This affiant therefore says that while he cannot state a valuation of said right with respect to the "Kentucky Babe Schottische" composition, he is unqualifiedly

of the opinion that the value of said right is less than ten dollars ($10).

This affiant further says that the period of popularity and salability of the perforated rolls for playing music of the class known as "Popular," including such pieces as "Kentucky Babe Schottische," seldom in any one locality exceeds six (6) months; that only the exceptional or exceptionally exploited pieces last as long as one year; that during the second year after the first introduction the sales, in the majority of instances, do not more than cover the expense of handling, and generally cease altogether after the second year—or in the case of a piece of more than ordinary popularity after the third year; and this affiant says, therefore, that the total number of sales of perforated rolls for any such piece made within the two or three years after its first introduction may safely and correctly be regarded as exhausting its salability, and that the entire profit which can be made by making and selling such rolls is made within the first two or three years, and any stock of such rolls remaining on hand at the end of the third year has only the value of waste paper, and the right or privilege of selling them thereafter is therefore of absolutely no value.

Further affiant saith not.

E. B. BARTLETT.

Subscribed and sworn to before me this 7th day of September, 1907.

MABEL E. ROGERS,
Notary Public.

[SEAL.]

My commission expires January 12, 1911.

IN THE SUPREME COURT OF THE UNITED STATES.

October Term, A. D. 1907.

No. 110.

White-Smith Music Publishing Company, *Appellant*, vs. Apollo Company, *Appellee*.	Appeal from the United States Circuit Court of Appeals, Second Circuit.

State of Illinois, County of Cook, ss.

E. B. BARTLETT, being first duly sworn, deposes and says that he is the secretary of the W. W. Kimball Company, which is engaged in the manufacture of musical instruments at Chicago, Illinois; that one department of the business of said company consists in the manufacture and sale of automatic musical instruments and piano-players and in the manufacture and sale of perforated controller sheets or rolls for such instruments; that in his capacity as the secretary of said company he has been obliged to become, and has become, familiar with all phases of the business of making and marketing such perforated controller sheets, commonly called perforated rolls or music rolls, and is familiar both with the cost of production and with the prices obtained for such rolls and with the conditions of the business which affect the profit obtainable on such rolls and the value of the right or privilege of making such rolls for musical compositions of various classes.

Affiant further says that he is acquainted with the musical composition entitled "Little Cotton Dolly," and with the perforated rolls for producing the same upon automatic musical instruments, which are the subject-matter of this suit.

This affiant further says that there is no custom or usage of the business, by reference to which the value of said right or

privilege with respect to any particular composition could be calculated; that except as to an occasional rare and exceptionally popular composition, or one which has been exploited by public performance and other means of advertising, composers generally are willing to have perforated rolls for playing their compositions made without any compensation to them for the privilege, and makers of such perforated rolls can at all times have a full supply of such popular music for their catalogues without compensation, because composers generally are desirous of having their music exploited by means of automatic instruments using such perforated rolls.

This affiant further says that the said composition of "Little Cotton Dolly" is not an exceptional composition in respect to popularity for automa ic playing, but belongs to the class mentioned of ordinary or average popularity in this respect and of which an abundant supply is at all times available for perforated roll purposes without compensation for the privilege of making or selling same.

This affiant further says that the average worth or value to a maker of such perforated rolls, of the right or privilege of making and selling same—that is to say, the value of such right with respect to the average musical composition, or one having average popularity, and of which the perforated rolls would have average salability—is a very small amount, and in fact is substantially nominal only, and this affiant says that ten dollars ($10) is more than the value of such right with respect to the average musical composition of the class to which "Little Cotton Dolly" belongs, and that if it were necessary for makers of perforated rolls to pay an average price of ten dollars ($10) for such right the entire profits of the business would be extinguished, and that price, on an average, would therefore be prohibitive. This affiant therefore says that while he cannot state a valuation of said right with respect to the "Little Cotton Dolly" composition, he is unqualifiedly of the

opinion that the value of said right is less than ten dollars ($10).

This affiant further says that the period of popularity and salability of the perforated rolls of playing music of the class known as "Popular," including such pieces as "Little Cotton Dolly," seldom in any one locality exceeds six months; that only the exceptional or exceptionally exploited pieces last as long as one year; that during the second year after the first introduction, the sales, in the majority of instances, do not more than cover the expense of handling, and generally cease altogether after the second year, or, in the case of pieces of more than ordinary popularity, after the third year; and this affiant says, therefore, that the total number of sales of perforated rolls for any such piece made within the two or three years after its first introduction may safely and correctly be regarded as exhausting its salability, and that the entire profit which can be made by making and selling such rolls is made within the first two or three years and any stock of such rolls remaining on hand at the end of two or three years has only the value of waste paper, and the right or privilege of selling them thereafter is therefore of absolutely no value.

Further affiant saith not.

E. B. BARTLETT.

Subscribed and sworn to before me this 7th day of September, A. D. 1907.

MABEL E. ROGERS,
Notary Public.

[SEAL.]

My commission expires January 12, 1911.

IN THE SUPREME COURT OF THE UNITED STATES.

October Term, A. D. 1907.

Nos. 110 and 111.

White-Smith Music Publishing Company, *Appellant*, vs. Apollo Company, *Appellee*.	Appeal from the United States Circuit Court of Appeals, Second Circuit.

State of New York, County of Kings, ss.

ADOLF L. JANSON, being first duly sworn, deposes and says that from April, 1900, until April, 1905, he was in the employ of the Apollo Company at New York, defendant-appellee in the above-entitled suits, in the capacity of cashier and bookkeeper; that in that capacity he had full charge of the receipt and checking of goods, and that all invoices for goods received passed through his hands and their contents were noted and checked against the goods as they arrived; that he had general charge and supervision of the files, books and records of account and merchandise of said Apollo Company; that he is acquainted with the perforated controller sheets commonly called "music rolls" for controlling the operation of automatic piano-players which were handled by said Apollo Company, and that he is familiar with the music rolls entitled respectively "Kentucky Babe Schottische" and "Little Cotton Dolly," which were contained in the catalogues of said Apollo Company as No. 3192 and No. 4559 respectively, one of which is Complainant's Exhibit 12 in the above-entitled suits respectively.

This affiant further says that during the entire time of his employment with the said Apollo Company the said Apollo Company handled no other perforated controller sheets or

music rolls except those which were manufactured by the Q. R. S. Company of Chicago, and that all such music rolls handled by the Apollo Company were furnished to said Apollo Company through the Melville Clark Piano Company of Chicago.

This affiant further says that the entire number of rolls No. 4559 entitled "Little Cotton Dolly" received by said Apollo Company during this affiant's employment with said company amounted to only eighteen (18) rolls, which were received by the Apollo Company from the Melville Clark Piano Company of Chicago and billed by said Melville Clark Piano Company to said Apollo Company upon invoices as follows:

Invoice dated Feb. 13, 1902, 1 roll;
" " Mar. 15, 1902, 2 "
" " Apr. 26, 1902, 6 "
" " May 28, 1902, 8 "
" " Nov. 2, 1904, 1 "

and that the entire number of rolls No. 3192, entitled "Kentucky Babe Schittische," received by said Apollo Company during this affiant's said employment with said company amounted to only twelve (12) rolls, which were received by said Apollo Company from the Melville Clark Piano Company and billed by said Melville Clark Piano Company to said Apollo Company upon invoices as follows:

Invoice dated Apr. 26, 1901, 1 roll;
" " June 11, 1902, 4 "
" " Nov. 20, 1902, 4 "
" " Oct. 31, 1903, 2 "
" " May 24, 1904, 1 "

This affiant further says that at the time this affiant left the employ of said Apollo Company, in April, 1905, there were still remaining on hand and unsold in the stock of said Apollo Company nine (9) of said "Kentucky Babe Schottische" rolls No. 3192 and ten (10) of said "Little Cotton Dolly" rolls No. 4559.

This affiant further says that there was no system or method

in use by said Apollo Company during the years of this affiant's employment by said company for causing to appear upon its books of account or records the titles or numbers of the particular rolls which were sold from time to time, and that this affiant has no knowledge, and has at no time had any knowledge, of any actual sales of said "Little Cotton Dolly" rolls by said Apollo Company; but from the above-stated facts within this affiant's knowledge that only twelve (12) of said "Kentucky Babe Schottische" rolls and only eighteen (18) of said "Little Cotton Dolly" rolls were at any time received by said Apollo Company during this affiant's employment with said company, and that nine (9) rolls of said "Kentucky Babe Schottische" and ten (10) rolls of said "Little Cotton Dolly" rolls remained unsold, this affiant is able to declare positively that the total number of said rolls sold by said Apollo Company during the period of this affiant's employment by said company could not have exceeded three rolls of "Kentucky Babe Schottische" and eight (8) rolls of said "Little Cotton Dolly."

This affiant further says that the pendency of the above-entitled suits had some effect in preventing special mention of said "Kentucky Babe Schottische" and "Little Cotton Dolly" to customers during the latter part of the year 1902 and the year 1903, and that, in his opinion, sales of the perforated rolls for each of said pieces would have been somewhat greater than they were but for this cause, but that the total number of said rolls purchased by the said Apollo Company, namely, eighteen (18) rolls of "Little Cotton Dolly" and twelve (12) rolls of "Kentucky Babe Schottische" were all that there is or was any reason to believe could possibly have been sold or used in any manner under the most favorable circumstances.

This affiant further says that the retail selling price of said "Kentucky Babe Schottische" rolls was one dollar and twenty cents ($1.20) per roll and of the "Little Cotton Dolly" rolls, one dollar and eighty cents ($1.80) per roll, and that these

prices were distinctly shown in the catalogue, and that it would have been practically impossible for any of said rolls to have been sold for higher prices than said catalogue prices respectively.

This affiant further says that the cost of said rolls to the Apollo Company was one-third (⅓) of said catalogue prices, to wit, forty ($0.40) cents each for said "Kentucky Babe Schottische" rolls and sixty ($0.60) cents each for said "Little Cotton Dolly" rolls.

This affiant further says that he has made a very careful computation of the profits made by the said Apollo Company of New York on its sales of said perforated rolls during the entire period when the same were being sold, to wit, the years 1902, 1903, 1904, and that such profit amounted to not above ten (10%) per cent. of the retail price of the rolls sold; that, in arriving at this result, all rolls given away to purchasers of musical instruments as inducements to such purchase are counted as if sold for cash at the full catalogue prices of said rolls, and that full account is made of all receipts derived from the customary fee for "Privilege of Library," which receipts this affiant says are about sufficient to cover the value of rolls required for replenishing the library and for rolls worn out in use and becoming dead and entirely out of demand.

This affiant further says that the said "Kentucky Babe Schottische" and said "Little Cotton Dolly" compositions both belong to a class of music commonly called and in said catalogue listed as "popular," and from seven years' experience in dealing in perforated rolls for automatic playing, this affiant says that the ordinary life or period of profitable salability of perforated rolls for such music as "Kentucky Babe Schottische" and "Little Cotton Dolly" does not exceed from six months to one year; that only in very rare instances of pieces of remarkable popularity does the salability of the rolls extend beyond eighteen months, and that after that length of time the rolls are called for so rarely that it does not pay to keep them

on the shelves. And this affiant further says that the said "Kentucky Babe Schottische" and said "Little Cotton Dolly" are not, nor is either of them, above the average of "popular" music in respect to popularity or salability of the perforated rolls for playing said pieces, and that the value of the privilege of selling such rolls, if said privilege in any case would have any commercial value, is properly to be ascertained by computation based upon the sales during a period not exceeding two years from the first introduction, or, if arrived at in advance of such sales, by computation based upon estimated sales for such period not exceeding two years; and that so far as the value of said right to the Apollo Company of New York is concerned, the total sales as hereinbefore stated, amounting to three (3) rolls of "Kentucky Babe Schottische" and to eight (8) rolls of "Little Cotton Dolly," which were sold during the entire period from April, 1902, to April, 1905, would not warrant the payment of any price whatever for such privilege.

This affiant further says that in accordance with all his experience and observation with respect to the period of salability of perforated rolls for the class of music to which said "Kentucky Babe Schottische" and "Little Cotton Dolly" belong, this affiant believes that the salability of said rolls has long since ceased, and that the profits which might have been made by said Apollo Company upon the total number of such rolls purchased by said company as above stated, would be the maximum amount of profits which said company could in any event derive, however long their right or privilege of selling same might continue.

Further affiant saith not.

ADOLF JANSON.

Subscribed and sworn to before me this 13th day of September, 1907.

JULIUS LEHRENKRAUSS, JR.,

[SEAL.] Notary Public, Kings County, N. Y., No. 103.

IN THE SUPREME COURT OF THE UNITED STATES.

October Term, A. D. 1907.

Nos. 110 and 111.

White-Smith Music Publishing Company, *Appellant*, *vs.* Apollo Company, *Appellee.*	Appeal from the United States Circuit Court of Appeals, Second Circuit.

State, City and County of New York, ss.

FRED KANN, being first duly sworn, deposes and says that he is the manager of the Apollo Company, of New York, having its place of business at 44 West 34th street, New York City, the defendant-appellee in the above-entitled suit; that he has had charge of the business of said Apollo Company as manager since the 10th day of October, 1903, to the present time. That part of the business of said Apollo Company consists in dealing in perforated controlling sheets, commonly called music rolls, for automatic musical instruments; that the only perforated rolls handled by said Apollo Company are those manufactured by the Q. R. S. Company, of Chicago, Illinois, and that all said Q. R. S. Company rolls obtained by said Apollo Company are obtained through Melville Clark Piano Company, of Chicago, Illinois, and that the catalogue of the Q. R. S. Company rolls, by reference to which all orders for the said rolls are made by the customers of said Apollo Company, are issued as the catalgoues of the Melville Clark Piano Company; that in said catalogue and in the books, accounts and orders of the said Apollo Company, the perforated rolls or music rolls for playing the piece of music entitled "Little Cotton Dolly" are known as No. 4559, and that the music rolls for playing the

musical composition entitled "Kentucky Babe Schottische" are known as No. 3192.

This affiant further says that the said Apollo Company has not bought or received any of said "Kentucky Babe Schottische" rolls No. 3192 nor any of said "Little Cotton Dolly" rolls No. 4559, nor any perforated rolls whatever for playing either of said pieces of music during the entire period during this affiant's connection with said company as manager thereof, and that said company has not during said period sold, given away or in any manner disposed of any of said "Kentucky Babe Schottische" rolls No. 3192 nor any of said "Little Cotton Dolly" rolls No. 4559, nor any perforated rolls whatever for playing either of said pieces of music; and that to the best of affiant's knowledge and belief there has been no call whatever from the customers of said Apollo Company for either of said rolls, unless for the purposes of this suit, during the said period of this affiant's connection with said company as said manager.

And further this affiant sayeth not.

Subscribed and sworn to before me this 12th day of September, 1907.

ROBERT R. GREASON,
Notary Public N. Y. County.

IN THE SUPREME COURT OF THE UNITED STATES.

October Term, A. D. 1907.

No. 111.

White-Smith Music Publishing Company, *Appellant*, *vs.* Apollo Company, *Appellee.*	Appeal from the United States Circuit Court of Appeals, Second Circuit.

State of Illinois, County of Cook, ss.

ALBERT N. PAGE, being first duly sworn, deposes and says that he is the secretary of the Melville Clark Piano Company; that he has been for six years past connected and familiar with the department of the business of said Melville Clark Piano Company which consists in handling automatic musical instruments and perforated controlling sheets for the same, sometimes called music rolls or perforated rolls; that he is familiar with the piece of music known as "Kentucky Babe Schottische," and with the so-called perforated rolls with which the above-entitled suit is concerned, made by the Q. R. S. Company of Chicago and De Kalb, Illinois, for playing said piece of music by means of automatic players.

This affiant further says that the said "Kentucky Babe Schottische" perforated rolls are manufactured by the Q. R. S. Company of Chicago, Illinois, at its factory at De Kalb, Illinois, and that this affiant's said company, the Melville Clark Piano Company, handles and markets, without profit to itself, the entire output of perforated rolls of said Q. R. S. Company, and has handled and marketed the same ever since the commencement of business of said Q. R. S. Company, and that the catalogue of the rolls manufactured by said Q. R. S. Company is issued and published as the catalogue of the said

Melville Clark Piano Company and contains a list of all the rolls made by said Q. R. S. Company; that said catalogue is furnished to the retail dealers in automatic musical instruments and perforated rolls who are customers of the Melville Clark Piano Company, and that such catalogues have been furnished continuously to the Apollo Company of New York, defendant-appellee in said suit, throughout the entire period of business of said company down to the present time; that the price of said "Kentucky Babe Schottische" perforated roll is plainly published in said catalogue at one dollar and twenty cents ($1.20), and that this affiant believes that, in view of such published price it would be practically impossible for the said Apollo Company to have sold any of said rolls at a higher price than one dollar and twenty cents ($1.20) each; that said rolls were furnished to said Apollo Company by the Melville Clark Piano Company at forty cents (40c.) each.

This affiant further says that the said Apollo Company of New York, during the entire period of its existence down to the present time, has handled not more than one-tenth (1/10) of the entire output of the Q. R. S. Company; that this affiant is well informed as to the general course of business of said Apollo Company of New York, and knows substantially the expense involved in handling said perforated rolls at retail, and believes that the percentage of profit to said Apollo Company of New York upon the sales of said perforated rolls does not materially exceed one-fourth (1/4) of the retail price of said rolls.

This affiant further says that the worth or value to said Apollo Company of New York of the right or privilege of selling said perforated rolls, or the rolls for any particular piece of music in said catalogue in its retail business, is not more than one-fifth (1/5) of the worth or value to the producing company (said Q. R. S. Company) of the like right and privilege for the wholesale business of such producing company.

This affiant further says that the said piece of music, "Kentucky Babe Schottische," belongs to a class of music commonly called "Popular," so-called, in distinction from certain other classes, such as classical music, sacred music, operatic music, orchestral arrangements, etc.; that the period of salability of the perforated rolls for playing any particular piece of music of said class of popular music is on the average very short, said music being what is commonly termed "short lived," and that the period of salability of the perforated rolls for playing such popular music seldom exceeds one year, and that a very large portion amounting to eighty per cent. (80%) of the series of such rolls are made within six months from the date of the first introduction of the same in the market, and that sales fall off very rapidly if they continue at all beyond the period of six months, and become rare and only occasional after one year from the date of first introduction; and that, with the exception of a very few pieces of exceptional popularity, or which have been exploited and advertised by exceptional means, the demand for such rolls after the first year following their first introduction does not cover the cost of handling and keeping them in stock.

This affiant further says that said piece of music, "Kentucky Babe Schottische," is in no respect above the average of the class of popular music in popularity or in the salability of its perforated rolls, and in fact, according to the actual experience of the Melville Clark Piano Company in handling said rolls, the salability of said perforated rolls is below the average of the entire class of popular music to which it belongs.

This affiant further says that of all the pieces for which Q. R. S. Company has cut and the Melville Clark Piano Company has handled perforated rolls for "popular" music during the entire business of said companies, there is only one of which the sale of rolls has amounted to more than five hundred (500), and that of the five next best selling

pieces the average number of rolls sold is only three hundred twenty (320), and that the average sale of perforated rolls of the entire class of "popular" music during the entire business of said companies has not been more than one hundred (100) rolls of each piece, and that the total actual sales of said "Kentucky Babe Schottische" perforated rolls during the entire period during which they have been catalogued by the Melville Clark Piano Company, from the date when they were first put on the market by the Melville Clark Piano Company down to the present time has amounted to only ninety-eight (98) rolls at forty cents (40c.) per roll, and that the gross amount of sales of said rolls to the present date has been less than forty dollars ($40); and that for more than three years past, although said "Kentucky Babe Schottische" has been retained in the catalogues of the Melville Clark Piano Company, and the perforated rolls for the same have been kept in stock and subject to order, there has been no selling demand whatever for said rolls; that said "Kentucky Babe Schottische" perforated rolls were first put on the market in January, 1901, and that of said total sales of ninety-eight (98) rolls above mentioned eighty-one (81) rolls were sold before the close of the year 1902, and only seventeen (17) rolls were sold thereafter down to the present time. This affiant further says that no sales of "Kentucky Babe Schottische" perforated rolls (except one roll, which this affiant believes was called for for use in connection with this litigation, and two rolls, which were sent to Australia to exhibit players) have been made since the year 1903, and that the sales of said rolls made prior to the year 1904 substantially exhausted the salability to the customers and trade reached by the Melville Clark Piano Company of said "Kentucky Babe Schottische" perforated rolls.

This affiant further says that the entire worth and value to the Melville Clark Piano Company and the producing company (the Q. R. S. Company) of the right or privilege of

making and selling said "Kentucky Babe Schottische" perforated rolls has not been and is not more than some comparatively small fraction of said sum of forty dollars ($40), which constitutes the gross amount of actual sales of said rolls; this affiant says that said producing company would not at any time have been warranted as a matter of business in paying any more than a nominal sum not exceeding ten per cent. (10%) of the gross sales above mentioned for the right or privilege of making and selling "Kentucky Babe Schottische" perforated rolls.

This affiant further says that the worth and value to the Apollo Company of New York of the privilege or right of sale of the "Kentucky Babe Schottische" perforated rolls in its business could not exceed such mere nominal sum of one-fifth (1/5) of the above estimated value of said right or privilege to said producing company.

Further affiant saith not.

ALBERT N. PAGE.

Subscribed and sworn to before me this 7th day of September, 1907.

MABEL E. ROGERS,
Notary Public.
My commission expires Jan. 12, 1911.

IN THE SUPREME COURT OF THE UNITED STATES.

October Term, A. D. 1907.

No. 110.

White-Smith Music Publishing Company, *Appellant,* vs. Apollo Company, *Appellee.*	Appeal from the United States Circuit Court of Appeals, Second Circuit.

State of Illinois, County of Cook, ss.

ALBERT N. PAGE, being first duly sworn, deposes and says that he is the secretary of the Melville Clark Piano Company; that he has been for six years past connected and familiar with the department of the business of said Melville Clark Piano Company which consists in handling automatic musical instruments and perforated controlling sheets for the same, sometimes called music rolls or perforated rolls; that he is familiar with the piece of music known as "Little Cotton Dolly," and with the so-called perforated rolls with which the above entitled suit is concerned, made by the Q. R. S. Company of Chicago and DeKalb, Illinois, for playing said piece of music by means of automatic players.

This affiant further says that the said "Little Cotton Dolly" perforated rolls are manufactured by the Q. R. S. Company, of Chicago, Illinois, at its factory at DeKalb, Illinois, and that this affiant's said company, the Melville Clark Piano Company, handles and markets without profit to itself the entire output of perforated rolls of said Q. R. S. Company, and has handled and marketed the same ever since the commencement of business of said Q. R. S. Company, and that the catalogue of the rolls manufactured by said Q. R. S. Company is issued and published as the catalogue of the said Melville Clark Piano

Company, and contains a list of all the rolls made by said Q. R. S. Company; that said catalogue is furnished to the retail dealers in automatic musical instruments and perforated rolls who are customers of the Melville Clark Piano Company, and that such catalogues have been furnished continuously to the Apollo Company of New York, defendant-appellee in said suit, throughout the entire period of business of said company down to the present time; that the price of said "Little Cotton Dolly" perforated roll is plainly published in said catalogue at One Dollar and Eighty Cents ($1.80), and that this affiant believes that in view of such published price it would be practically impossible for the said Apollo Company to have sold any of said rolls at a higher price than One Dollar and Eighty Cents ($1.80) each; that said rolls were furnished to said Apollo Company by the Melville Clark Piano Company at Sixty Cents (60c.) each.

This affiant further says that the said Apollo Company of New York, during the entire period of its existence down to the present time, has handled not more than one-tenth (1/10) of the entire output of the Q. R. S. Company; that this affiant is well informed as to the general course of business of said Apollo Company of New York, and knows substantially the expense involved in handling said perforated rolls at retail, and believes that the percentage of profit to said Apollo Company of New York upon the sales of said perforated rolls does not materially exceed one-fourth (¼) of the retail price of said rolls.

This affiant further says that the worth or value to said Apollo Company of New York of the right or privilege of selling said perforated rolls, or the rolls for any particular piece of music in said catalogue in its retail business, is not more than one-fifth (1/5) of the worth or value to the producing company (said Q. R. S. Company) of the like right and privilege for the wholesale business of such producing company.

This affiant further says that the said piece of music, "Little

Cotton Dolly," belongs to a class of music commonly called "Popular," so called in distinction from certain other classes, such as classical music, sacred music, operatic music, orchestral arrangements, etc.; that the period of salability of the perforated rolls for playing any particular piece of music of said class of popular music is on the average very short, said music being what is commonly termed "short-lived," and that the period of salability of the perforated rolls for playing such popular music seldom exceeds one year, and that a very large portion, amounting to eighty per cent. (80%) of the sales of such rolls are made within six months from the date of the first introduction of the same in the market, and that sales fall off very rapidly if they continue at all beyond the period of six months, and become rare and only occasional after one year from date of first introduction; and that with the exception of a very few pieces of exceptional popularity, or which have been exploited and advertised by exceptional means, the demand for such rolls after the first year following their first introduction does not cover the cost of handling and keeping them in stock.

This affiant further says that said piece of music, "Little Cotton Dolly," is in no respect above the average of the class of popular music in popularity or in the salability of its perforated rolls, and in fact, according to the actual experience of the Melville Clark Piano Company in handling said rolls, the salability of said perforated rolls is below the average of the entire class of popular music to which it belongs.

This affiant further says that of all the pieces for which the Q. R. S. Company has cut and the Melville Clark Piano Company has handled perforated rolls for "Popular" music during the entire business of said companies, there is only one of which the sale of rolls has amounted to more than five hundred (500), and that of the five next best selling pieces the average number of rolls sold is only three hundred twenty (320), and that the average sale of perforated rolls of the entire class of

"Popular" music during the entire business of said companies has not been more than one hundred (100) rolls of each piece, and that the total actual sales of said "Little Cotton Dolly" perforated rolls during the entire period during which they have been catalogued by the Melville Clark Piano Company, from the date when they were first put on the market by the Melville Clark Piano Company down to the present time, has amounted to only sixty-four (64) rolls at sixty cents (60c.) per roll, and that the gross amount of sales of said rolls to the present date has been less than forty dollars ($40); and that for more than three years past, although said "Little Cotton Dolly" has been retained in the catalogues of the Melville Clark Piano Company, and the perforated rolls for the same have been kept in stock and subject to order, there has been no selling demand whatever for said rolls; that said "Little Cotton Dolly" perforated rolls were first put on the market in January, 1902, and that of said total sales of sixty-four (64) rolls above mentioned, fifty-six (56) rolls were sold before the close of the year 1902, and only eight (8) rolls were sold thereafter down to the present time. This affiant further says that no sales of "Little Cotton Dolly" perforated rolls (except one roll which this affiant believes was called for for use in connection with this litigation) have been made since the year 1903, and that the sales of said rolls made prior to the year 1904 substantially exhausted the salability to the customers and trade reached by the Melville Clark Piano Company of said "Little Cotton Dolly" perforated rolls.

This affiant further says that the entire worth and value to the Melville Clark Piano Company and the producing company (the Q. R. S. Company) of the right or privilege of making and selling said "Little Cotton Dolly" perforated rolls has not been and is not more than some comparatively small fraction of said sum of forty dollars ($40), which constitutes the gross amount of actual sales of said rolls; this affiant says that said producing company would not at any time have been

warranted as a matter of business in paying any more than a nominal sum, not exceeding ten per cent. (10%) of the gross sales above mentioned for the right or privilege of making and selling "Little Cotton Dolly" perforated rolls.

This affiant further says that the worth and value to the Apollo Company of New York of the privilege or right of sale of the "Little Cotton Dolly" perforated rolls in its business could not exceed such mere nominal sum of one-fifth (1/5) of the above estimated value of said right or privilege to said producing company.

Further affiant saith not.

ALBERT N. PAGE.

Subscribed and sworn to before me this 7th day of September, 1907.

MABEL E. ROGERS.
Notary Public.

IN THE SUPREME COURT OF THE UNITED STATES.

October Term, A. D. 1907.

Nos. 110 and 111.

White-Smith Music Publishing Company, *Appellant*, vs. Apollo Company, *Appellee*. | Appeal from the United States Circuit Court of Appeals, Second Circuit.

MESSRS. GIFFORD & BULL,
141 Broadway, New York,
Counsel for Appellant.

Gentlemen:—

You are handed herewith copies of affidavits by Willard F. Wallace, G. Howlett Davis, and Ernest G. Clark (2), which you are hereby notified we shall ask leave of court to file, and

which, together with the affidavits served upon you on September 17, 1907, and any counter-affidavits filed on behalf of the appellant we shall ask the court to consider in connection with motions to dismiss the appeals in both said suits which will be hereafter entered for an early motion day in the coming October term of said court.

CHARLES S. BURTON,
Of Counsel for Appellee.

Received above notice and copies of affidavits therein mentioned at New York City, this 20th day of September, 1907.

GIFFORD & BULL.

IN THE SUPREME COURT OF THE UNITED STATES.

October Term, A. D. 1907.

Nos. 110 and 111.

White-Smith Music Publishing Company, *Appellant*, vs. Apollo Company, *Appellee*.	Appeal from the United States Circuit Court of Appeals, Second Circuit.

State of New York, County of New York, ss.

WILLARD F. WALLACE, being first duly sworn, deposes and says, that he is connected with the Perforated Music Roll Company of New Jersey, of which he is the treasurer.

That he has been connected with the business of manufacturing and marketing perforated music rolls for automatic musical instruments for one and one-half years past, and that he has been connected with the said Perforated Music Roll Company since March, 1906; and that he is thoroughly familiar with the demand for and sales of the perforated rolls of

that company, and with the conditions affecting the prices and profits obtainable, and with the cost of manufacture of said rolls, and with all the facts and circumstances and conditions which might affect the value to the manufacturer of the privilege of making and selling such rolls for any particular piece of music.

This affiant further says that the compositions entitled "Kentucky Babe Schottische" and "Little Cotton Dolly," which are involved in the above entitled suits, were catalogued by the Perforated Music Roll Company when this affiant first became connected with said company, and remained in the catalogue of said company and subject to orders of customers to date, but that during the entire period of this affiant's connection with said company there has been little or no demand or inquiry for said "Kentucky Babe Schottische" or "Little Cotton Dolly" rolls.

This affiant further says that both said "Kentucky Babe Schottische" and said "Little Cotton Dolly" were considered "poor sellers." This affiant further says that any piece of music of the class commonly called "Popular," to which said "Kentucky Babe Schottische" and "Little Cotton Dolly" belong, perforated rolls for which were sold up to or near to the number of one hundred (100), would be classed as a fair or good seller, and that the fact that both said pieces were considered as poor sellers, indicates that the sales of rolls for each of said pieces would fall considerably below one hundred (100) rolls during the entire period of their salability, which had practically ended before this affiant became connected with said company, that is, one and one-half years ago.

This affiant further says that there is no custom or usage of the business by which the value of the right or privilege of making or selling such perforated rolls for any particular composition could be calculated; that except as to an occasional rare or exceptionally popular composition, or one which has been exploited by public performance or other means of advertising,

composers are generally willing to have perforated rolls for playing their compositions of the class of "Popular" music made without any compensation to them for the privilege; and makers of such perforated rolls can at all times have a full supply of such popular music for their catalogue without compensation, because composers generally are desirous of having their music exploited or advertised by means of automatic instruments, using such perforated rolls; and that such has been the case throughout the entire period of this affiant's connection with said business.

This affiant further says that the period of popularity and salability of the perforated rolls for playing music of the class known as "Popular," including such pieces as "Kentucky Babe Schottische" and "Little Cotton Dolly," seldom in any one locality exceeds six months; that only the exceptional or exceptionally exploited pieces last in respect to salability as long as one year; that during the second year after their first introduction the sales, in majority of instances, do not cover more than the expense of handling, and that sales generally cease altogether after the second year, or in the case of a piece of more than ordinary popularity, after the third year, and this affiant says, therefore, that the total number of sales of perforated rolls for any such piece made within two or three years after its first introduction may be safely counted, and may correctly be regarded as exhausting its salability; and that the entire profit which can be made by making and selling such rolls is made usually within the first year, and almost invariably within the first two years, and that any stock of such rolls remaining on hand at the end of the third year has only the value of waste paper, and the right or privilege of selling them is therefore of absolutely no value.

This affiant further says that the average worth or value to a maker of such perforated rolls of the right or privilege of making and selling the same in the case of "Popular" musical compositions of average popularity for automatic playing, and

of which the perforated rolls for such playing would have average salability, is in any event a very small amount, even for the full period of popularity and salability. And this affiant says that while it is not possible to fix definitely the value of such privilege with respect to "Kentucky Babe Schottische" and "Little Cotton Dolly," this affiant is unhesitatingly of the opinion that such right or privilege, with respect to either of said pieces, was never worth so much as Ten Dollars ($10), for this affiant says that said pieces being of only average salability in perforated rolls, could not be worth more than the average of the entire class of "Popular" music to which they belong, and that an average charge of Ten Dollars ($10) for the privilege of cutting and selling perforated rolls for this class of music would extinguish the entire profits of the business and would therefore be absolutely prohibitive.

This affiant further says that the value of the right or privilege of cutting and selling perforated rolls for any particular piece of "Popular" music estimated on the basis of the aggregate sales of such rolls is in any event only a very small percentage of the profits made on such sales; for this affiant says that the lack of any particular piece from the catalogue of stock of the maker or dealer in perforated rolls does not entail the loss of sales to the number of rolls which would be sold of that particular piece if it were in stock or catalogue, but only the loss of the very small percentage of sales consisting of those which will be called for by customers desiring that particular piece, and who would not be satisfied with any other piece of the same general character, or appealing to the same taste; for this affiant says that the demand of customers in each instance of purchase of rolls is usually only for the music of a certain sort or general character, and that, lacking any particular piece of the character desired, they are satisfied with another piece of the same general character, so that each dealer sells to his customers the pieces which he has in stock of the

character sought for, and does not lose the sale because he does not happen to have a particular piece which may have been mentioned; and this affiant says that the percentage of calls which could be satisfied only with a particular piece called for is very small indeed, and would not warrant any maker or dealer in perforated rolls in paying more than 5 per cent. or at the utmost 10 per cent. on the *net profits* which he could make on all the sales of rolls for that piece of music.

This affiant therefore says that the privilege of making and selling perforated rolls for "Kentucky Babe Schottische" or the like privilege with respect to "Little Cotton Dolly" is not now worth any sum whatever to any maker of perforated rolls or dealer therein; and that for the same reasons the exclusive right or privilege of making and selling such rolls for said pieces is at this time of absolutely no value; and the same is true, without regard to the length of time in the future through which such privilege, exclusive or non-exclusive, might continue; because this affiant says that in all his experience in the making and handling of perforated rolls, there has never to his knowledge been an instance of revival or return of salability of the perforated rolls of a piece of music of which said rolls had passed through one period of salability and become "dead" or unsalable.

WILLARD F. WALLACE.

Subscribed and sworn to before me this 20th day of September, 1907.

JACOB H. GOETZ,
Commissioner of Deeds,
New York City.

[SEAL.]

IN THE SUPREME COURT OF THE UNITED STATES.

October Term, A. D. 1907.

Nos. 110 and 111.

White-Smith Music Publishing Company, *Appellant*, vs. Apollo Company, *Appellee*.	Appeal from the United States Circuit Court of Appeals, Second Circuit.

State of New York, County of New York, ss.

G. HOWLETT DAVIS, being first duly sworn, deposes and says that he resides at Orange, New Jersey; that for fifteen years last past he has been connected with and engaged in the business of manufacturing automatic musical instruments and players, and particularly with the manufacture of perforated controlling sheets, commonly called "music rolls" or "perforated rolls" for controlling the playing of such automatic instruments and players; that he is the treasurer and business manager of the Standard Music Roll Company of Orange, N. J., engaged in the manufacture of such perforated rolls; that during part of the years 1902 to 1906, inclusive, and part of the present year, 1907, he was connected with and active manager and factory superintendent of the Perforated Music Roll Company of New Jersey, having factories at New York and at Schenectady, in the State of New York, and its chief business office at New York City, State of New York; that he is thoroughly familiar, and for many years past has been thoroughly familiar with all departments and features of the business of manufacturing and disposing of such perforated rolls or music rolls; that he is and was through the entire period of his said connection with the Perforated Music Roll Company, and for several years prior thereto, familiar with the demand

and market for such music rolls and with the cost of production and with the conditions of the business affecting the prices and profit obtainable at wholesale and retail for the same, and affecting the value of the right or privilege of making such rolls for musical compositions of the various classes of music for which such rolls are used.

This affiant further says that he is acquainted with the musical compositions entitled "Kentucky Babe Schottische" and "Little Cotton Dolly," and with the perforated rolls for producing the same upon automatic musical instruments which are subject-matter of above entitled suits.

This affiant further says that there is no custom or usage of the business by which the value of the right or privilege of making or selling such perforated rolls for any particular composition could be calculated; that except as to an occasional rare or exceptionally popular composition, or one which has been exploited by public performance or other means of advertising, composers generally are willing to have perforated rolls for playing their compositions of the class of "popular" music made without any compensation to them for the privilege; and makers of such perforated rolls can at all times have a full supply of such popular music for their catalogues without compensation, because composers generally are desirous of having their music exploited or advertised by means of automatic instruments, using such perforated rolls; and that such has been the case throughout the entire period of this affiant's connection with said business (and particularly during the years 1902 and following, down to the present time).

This affiant further says that said compositions "Kentucky Babe Schottische" and "Little Cotton Dolly" are not exceptionl compositions in respect to popularity for automatic playing, but that said compositions belong to the class above mentioned, of ordinary or average—or less than average—popularity for this purpose, and that they are compositions of which the perforated rolls would be expected to have only av-

erage salability, and that they are in this respect of the sort of which an abundant supply is at all times available to perforated roll makers for perforated roll purposes, without compensation for the privilege of making or selling such rolls.

This affiant further says that the period of popularity and salability of the perforated rolls for playing music of the class known as "Popular," including such pieces as "Kentucky Babe Schottische" and "Little Cotton Dolly," seldom in any one locality exceeds six months; that only the exceptional or exceptionally exploited pieces last in respect to salability as long as one year; that during the second year after their first introduction the sales, in majority of instances, do not cover more than the expense of handling, and that sales generally cease altogether after the second year—or in the case of a piece of more than ordinary popularity, after the third year; and this affiant says, therefore, that the total number of sales of perforated rolls for any such piece made within two or three years after its first introduction may safely be counted, and may correctly be regarded, as exhausting its salability, and that the entire profit which can be made by making and selling such rolls is made usually within the first year, and almost invariably within the first two years, and that any stock of such rolls remaining on hand at the end of the third year has only the value of waste paper, and the right or privilege of selling them is therefore of absolutely no value.

This affiant further says that the average worth or value to a maker of such perforated rolls of the right or privilege of making or selling the same, in the case of "Popular" musical compositions of average popularity for automatic playing, and of which the perforated rolls for such playing would have average salability, is in any event a very small amount, even for the full period of popularity and salability. And this affiant says that while it is not possible to fix definitely the value of such privilege with respect to "Kenutcky Babe Schottische" and "Little Cotton Dolly," this affiant is unhesitatingly of the opin-

ion that such right or privilege, with respect to either of said pieces, was never worth so much as Ten Dollars ($10), for this affiant says that said pieces being of only average salability in perforated roll, could be not worth more than the average of the entire class of "Popular" music to which they belong, and that an average charge of Ten Dollars ($10) for the privilege of cutting and selling perforated rolls for this class of music would extinguish the entire profits of the business and would therefore be absolutely prohibitive.

This affiant further says that the value of the right or privilege of cutting and selling perforated rolls for any particular piece of "Popular" music, estimated on the basis of the aggregate sales of such rolls, is in any event only a very small percentage of the profits made on such sales; for this affiant says that the lack of any particular piece from the catalogue or stock of the maker or dealer in perforated rolls does not entail the loss of sales to the number of rolls which would be sold of that particular piece if it were in stock or catalogue, but only the loss of the very small percentage of sales consisting of those which will be called for by customers desiring that particular piece, and who would not be satisfied with any other piece of the same general character, or appealing to the same taste; for this affiant says that the demand of customers in each instance of purchase of rolls is usually only for music of a certain sort or general character, and that lacking any particular piece of the character desired, they are satisfied with another piece of the same general character, so that each dealer sells to his customers the pieces which he has in stock of the character sought for, and does not lose the sale because he does not happen to have a particular piece which may have been mentioned; and this affiant says that the percentage of calls which could be satisfied only with a particular piece called for is very small indeed, and would not warrant any maker or dealer in perforated rolls in paying more than 5 per cent., or at the ut-

mist 10 per cent. on the *net profit* which he could make on all the sales of such rolls.

This affiant further says, in his opinion, the exclusive right or privilege of making or selling perforated rolls for any piece of "Popular" music of ordinary or average popularity, or of which the perforated rolls would have average salability, is worth no more to the maker or dealer in such rolls than the mere unexclusive privilege or permission to make or sell the same; because this affiant says that every maker and dealer in such rolls obtains many inquiries for and makes many sales of its own perforated rolls by reason of the sales of the rolls of other makers and dealers for the same music, causing the piece to be recommended by such purchasers to their acquaintances, and that the sales made from this cause are more than would be secured from the small percentage of the other manufacturers' customers who would accept nothing else than the particular piece asked for, and would thereby be compelled to buy it of the maker having the exclusive rights in respect to it.

With respect to the particular pieces mentioned, "Kentucky Babe Schottische" and "Little Cotton Dolly," this affiant says that his former company, The Perforated Music Roll Company, made and put on the market perforated rolls for said pieces at 75 cents each, and 75 cents each, respectively, or thereabouts, and that the salability of said rolls and the demand for the same was so far below the average or ordinary salability of rolls of that class of music that both said titles, "Kentucky Babe Schottische" and "Little Cotton Dolly," were included in a list kept by said The Perforated Music Roll Company called "Bad Sellers," as distinguished from another list which said company kept entitled "Preferred," and that the sales of said "Kentucky Babe Schottische" and "Little Cotton Dolly" rolls substantially ceased and their salability was exhausted at least three years ago. This affiant says further that any composition of the class of "Popular" music, of which

the rolls sold up to or near to the number of one hundred, was considered a "fair seller," and would not be classed as a "bad seller," and that the sales of neither of said pieces by The Perforated Music Roll Company amounted in the aggregate during the entire life or period of salability to as much as seventy-five rolls.

This affiant therefore says that the privilege of making and selling perforated rolls for "Kentucky Babe Schottische" or the like privilege with respect to "Little Cotton Dolly," is not now worth any sum whatever to any maker of perforated rolls or dealer therein; and that for the same reasons the exclusive right or privilege of making and selling such rolls for said pieces is at this time of absolutely no value; and the same is true, without regard to the length of time in the future through which such privilege, exclusive or non-exclusive, might continue; because this affiant says that in all his fifteen years' experience in the making and handling of perforated rolls, there has never to his knowledge been an instance of revival or return of salability of the perforated rolls of a piece of music of which such rolls had passed through one period of salability and become "dead" or unsalable.

G. HOWLETT DAVIS.

Subscribed and sworn to before me this 17th day of September, 1907.

RAYMOND E. SMITH,
Notary Public.

[NOTARIAL SEAL.]

IN THE SUPREME COURT OF THE UNITED STATES.
October Term, A. D. 1907.
No. 111.

White-Smith Music Publishing Company, *Appellant*, vs. Apollo Company, *Appellee*.	Appeal from the United States Circuit Court of Appeals, Second Circuit.

State of Illinois, County of Cook, ss.

ERNEST G. CLARK, being first duly sworn, deposes and says that he is familiar with the perforated paper-controlling sheets, commonly called music rolls or perforated rolls, made and used for the purpose of playing automatically upon a piano the piece of music known as the "Kentucky Babe Schottische," and which is involved in controversy in the above entitled suit; that the perforated roll, Complainant's Exhibit No. 12, in said suit, and others like it, were made by the Q. R. S. Company, a corporation of the State of Illinois, having its office at Chicago, Illinois, and factory at DeKalb, Illinois; that this affiant is its president, and has been its president since its organization, and during the entire period of the operation of said company has had practical charge of its affairs, both in the manufacturing and distributing of its products.

This affiant says that the perforated rolls made by said company for playing "Kentucky Babe Schottische," of which the Complainant's Exhibit No. 12 is one, are designated by said Q. R. S. Company in its catalogue and accounts as No. 3192; and that all the perforated rolls made by said Q. R. S. Company for playing said music entitled "Kentucky Babe Schottische" are known and numbered as No. 3192, and that the entire number of such "Kentucky Babe Schottische" rolls No. 3192 which said Q. R. S. Company has ever made, up to this time, amount to one hundred fifty (150) rolls, and no more.

This affiant further says that the records of said Q. R. S. Company, kept under the direction of, and now in the custody and control of this affiant, show all the sales and deliveries of said "Kentucky Babe Schottische" rolls, and that the total number of rolls sold and delivered, or in any manner furnished to any parties, from the date of the first cutting of said rolls down to the present time, is ninety-eight (98) rolls, and no more, and that of said ninety-eight (98) rolls thirty-eight (38) rolls were sent to foreign countries, and only sixty (60) rolls were sold or delivered for use in the United States; and that said Q. R. S. Company has now on hand remaining unsold twenty-four (24) out of said one hundred fifty (150) rolls of "Kentucky Babe Schottische" No. 3192, and that the remaining twenty-eight (28) rolls out of said total of one hundred fifty (150) are accounted for as defective and discarded and thrown into waste paper upon inspection immediately after cutting, by reason of flaws in the paper and short lengths, and as otherwise injured by handling in stock, and as used up in exhibiting players in the salesroom.

This affiant further says that upon the orders of the Melville Clark Piano Company said Q. R. S. Company has furnished and sent to the Apollo Company of New York twelve (12) of said "Kentucky Babe Schottische" rolls No. 3192, which were forwarded to said Apollo Company at or about the following dates, respectively:

April	22, 1901,	1 roll;
June	11, 1902,	4 rolls;
Nov.	20, 1902,	4 rolls;
Oct.	31, 1903,	2 rolls;
May	21, 1904,	1 roll;
	Total,	12 rolls.

and this affiant says that said twelve (12) rolls constitute the entire number of such "Kentucky Babe Schottische" rolls which have ever been furnished or sent directly or indirectly

to said Apollo Company of New York by said Q. R. S. Company.

And this affiant further says that the price at which said "Kentucky Babe Schottische" rolls No. 3192 were sold to said Apollo Company of New York was forty cents (40c.) each, and that the manufacturing cost of said rolls, including boxing, was about twenty-five cents (25c.) each, and that all of said rolls were furnished boxed in the manner of said Complainant's Exhibit No. 12.

This affiant further says that the retail selling price of said "Kentucky Babe Schottische" rolls No. 3192 was plainly published in the catalogue of such rolls furnished to said Apollo Company, and that the retail price so published was One Dollar and Twenty Cents ($1.20) each.

This affiant further says that he is familiar with the method and course of business of the Apollo Company of New York, and with the general range and character of the expense involved in carrying on said retail business, and particularly in the sale of perforated rolls, and that according to his best information and belief the margin of profit to said Apollo Company of New York per roll, during the entire period of the sale of such rolls, was about double that of the Q. R. S. Company on the same rolls, and that said Apollo Company has during said period handled not to exceed one-tenth (1/10) of the entire output of the perforated rolls of the Q. R. S. Company, and that therefore the value to the Apollo Company of the right to sell such perforated rolls is not, and has not been at any time, more than one-fifth (1/5) the value to the Q. R. S. Company of the right to make and sell the same rolls.

This affiant further says that there is no usage or custom of the business by means of which to calculate the value of the privilege in question with respect to any particular piece of music, if such privilege has any commercial value, but the value of such right or privilege must be estimated in advance in either one of two ways.

First, by taking into account the probable total sales of such rolls, based upon the average experience with respect to music of like class and equal popularity, and allowing a certain percentage upon such estimated probable sales, and in the opinion of this affiant, according to this method the value of the right or privilege could not in any case exceed ten per cent (10%) of the estimated sales.

Second, by ascertaining what amount the business of making and selling such rolls could stand as an average price for all the compositions for which rolls are made and catalogued.

For the purpose of arriving at a valuation by the first method, this affiant says that the said piece of music, "Kentucky Babe Schottische," belongs to a class of so-called "popular" music, and that the popularity or salability of perforated rolls for said "Kentucky Babe Schottische" is not above the average of all pieces of that class.

This affiant says that very few pieces of music of that class continue to be in demand or salable to any considerable extent longer than one or two years, and that the average life or period of salability of perforated rolls for such music for any one locality seldom exceeds a single season or period of six months; that inquiries for and sales of such rolls after the first six months from their introduction, except in case of a few of rare and exceptional merit and popularity, are only occasional; that such pieces frequently acquire popularity in a given locality, as on the Atlantic Coast, several months before they become known at all in the more remote localities, so that a piece whose popularity has practically ceased at New York City may be acquiring its first popularity at San Francisco, and that the average period of salability of such pieces from the time of their earliest popularity at the locality where they are first introduced in the United States to the end of the period of profitable salability at the locality where they are last introduced in the United States does not ordinarily exceed one year.

This affiant further says that the average total number of rolls sold by the Q. R. S. Company of any one composition of the class of "popular music," to which said "Kentucky Babe Schottische" belongs, does not exceed one hundred fifty (150) rolls, and that in order to make an average so high as this there must be included all the most popular rolls of that class; that of the rolls of average popularity, excluding a very small number of exceptional popularity, the average sale before their popularity ceases and they become unsalable does not exceed one hundred (100) rolls; that the total retail selling price of that number of rolls of the length of "Kentucky Babe Schottische" would be One Hundred Twenty Dollars ($120), the total price received by the Q. R. S. Company, Forty Dollars ($40), and the valuation of said privilege upon the basis of ten per cent. (10%) of the total sales would be Four Dollars ($4).

This affiant further says that upon a basis of the percentage on the total sales, it is possible at the present date to arrive at the valuation of that right or privilege with respect to "Kentucky Babe Schottische" rolls without any uncertainty such as is involved in estimating in advance the probable sales; for this affiant says that the rolls for "Kentucky Babe Schottische" were first cut by Q. R. S. Company in January, 1901; that it has been retained in the catalogue, subject to order and sale, up to the present time, and that, with the exception of the one roll furnished to the Apollo Company of New York, May 21, 1904 (which this affiant understands was called for by reason of this litigation, and two rolls which were sent to Australia voluntarily, merely as a means of exhibiting players, and not upon any order of customers), the last order or request received by the Q. R. S. Company for "Kentucky Babe Schottische" rolls was an order for one roll, which was filled December 1, 1903, so that for a period of over three and one-half years, while that piece has remained in the catalogue, there has been no demand for it.

This affiant therefore says that in his opinion the sales actually made, amounting, as above stated, to ninety-eight (98) rolls, exhausted the salability of said rolls; that the total profit made by the Q. R. S. Company on the entire number of said rolls sold could not possibly have exceeded Fifteen Dollars ($15). The total value of the entire sales did not exceed Forty Dollars ($40), and on the basis of ten per cent. (10%) royalty, the total value, therefore, of the privilege did not exceed Four Dollars ($4).

If the Apollo Company of New York had sold at the full catalogue price the entire number of said rolls which it received from the Q. R. S. Company (twelve of said rolls), the total gross profits of said Apollo Company on said sales, making no deduction for the expense or cost of sale, would have been only Nine Dollars and Sixty Cents ($9.60), and the salability of said rolls being now ended, that sum, less the cost of doing the business, exceeds the total maximum value to that company of the right or privilege of selling said rolls.

Upon the basis of the second suggested method of arriving at the valuation of said right or privilege, viz., the amount that the business could stand as a lump price for such right, this affiant says that the total number of pieces for which perforated rolls are made by the Q. R. S. Company and carried in its catalogue is about twelve thousand (12,000); that this number includes a large percentage of classical music, on which the sales are larger and more reliable and enduring than upon the class of popular music to which said "Kentucky Babe Schottische" belongs, and includes also a large percentage of operatic music, upon which also the sales are more reliable and enduring than upon the class of popular music. This affiant says that if the Q. R. S. Company were obliged to pay on an average of Ten Dollars ($10) for the right and privilege of making perforated rolls of each of the pieces which it carries in its catalogue, and of which it carries such rolls in stock and on sale, an interest charge of five per cent. (5%)

upon the capital sum of One Hundred Twenty Thousand Dollars ($120,000) which it would therefore be required to invest in said business would absorb the entire profits and would be absolutely prohibitive of the continuance of said business.

This affiant further says that in view of the short life or limited period of salability of a large percentage of perforated rolls for the music carried in stock and in catalogue, it is necessary, in order to maintain the volume of business without diminution from month to month and from year to year, to continually add new pieces to the catalogue and stock; that the total amount of such pieces necessary in order merely to maintain the business at its present volume without increase is about one thousand (1,000) pieces per annum, and that since this number of additions would merely offset the number of pieces during the same period becoming dead or unsalable, if it were necessary to pay Ten Dollars ($10) for the right or privilege of making perforated rolls for each of these additional pieces, the amount thus required—Ten Thousand Dollars ($10,000) per annum—would be substantially of the nature of expense to be charged against the gross profits of the business; and this affiant says that such a charge alone, without the interest charge above mentioned, would be absolutely prohibitive, because it would exceed the entire profits, and would compel the suspension of said business.

From this method of calculation as to the possible maximum value of a piece of average popularity and salability, as "Kentucky Babe Schottische," this affiant is clearly and positively of the opinion that such right or privilege would not be worth to exceed the sum of Five Dollars ($5) to the Q. R. S. Company, and that it is very doubtful whether said company could continue in business if that low basis of valuation were applied to all the pieces for which it makes perforated rolls and corresponding prices exacted for such privilege.

This affiant further says that the value of said right or privilege to the Apollo Company of New York is, and at all times

since the commencement of this suit has been, altogether nominal, and not to exceed One Dollar ($1).

This affiant further says that he has just completed a careful examination of the records of cuttings of perforated rolls of "Popular" music of the Q. R. S. Company, with respect to the number of rolls cut of the most popular and salable pieces, and he finds that the total number of rolls cut for any piece of "Popular" music in the entire business of the Q. R. S. Company has not exceeded five hundred (500) rolls, with one single exception, and in the case of that single exception the total number of rolls cut was one thousand one hundred eighty (1,180), the piece having a popular run from December, 1902, to about one year ago—that is to say, nearly four years —and that the average number of rolls cut of the five (5) best selling pieces, excluding the one above mentioned, is three hundred forty-three (343) rolls, of which the average number on hand is twenty-three (23), and of which the average number sold and otherwise disposed of is three hundred twenty (320).

Further affiant saith not.

E. G. CLARK.

Subscribed and sworn to before me this 7th day of September, 1907.

JOHN T. BOWLES,
Notary Public.

[SEAL.]

My commission expires June 16, 1909.

JOHN T. BOWLES.

ever been furnished or sent directly or indirectly to said Apollo Company of New York by said Q. R. S. Company.

And this affiant further says that the price which said "Little Cotton Dolly" rolls No. 4559 were sold to said Apollo Company of New York was Sixty Cents (60c.) each, and that the manufacturing cost of said rolls, including boxing, was about Thirty-Five Cents (35c.) each, and that all of said rolls were furnished boxed in the manner of said Complainant's Exhibit No. 12.

This affiant further says that the retail selling price of said "Little Cotton Dolly" rolls No. 4559 was plainly published in the catalogue of such rolls furnished to such Apollo Company, and that the retail price so published was One Dollar and Eighty Cents ($1.80) each.

This affiant further says that he is familiar with the method and course of business of the Apollo Company of New York, and with the general range and character of the expense involved in carrying on said retail business, and particularly in the sale of perforated rolls, and that according to his best information and belief the margin of profit to said Apollo Company of New York per roll, during the entire period of the sale of such rolls, was about double that of the Q. R. S. Company on the same rolls, and that said Apollo Company has during said period handled not to exceed one-tenth (1/10) of the entire output of the perforated rolls of the Q. R. S. Company, and that therefore the value to the Apollo Company of the right to sell such perforated rolls is not, and has not been at any time, more than one-fifth (1/5) the value to the Q. R. S. Company of the right to make and sell the same rolls.

This affiant further says that there is no usage or custom of the business by means of which to calculate the value of the privilege in question with respect to any particular piece of music, if such privilege has any commercial value, but the value of such right or privilege might be estimated in advance in either one of two ways:

First, by taking into account the probable total sales of such rolls, based upon the average experience with respect to music of like class and equal popularity, and allowing a certain percentage upon such estimated probable sales; and in the opinion of tl is affiant, according to this method the value of the right or privilege could not in any case exceed ten per cent. (10%) of the estimated sales;

Second, by ascertaining what amount the business of making and selling such rolls could stand as an average price for all the compositions for which rolls are made and catalogued.

For the purpose of arriving at a valuation by the first method, this affiant says that the said piece of music, "Little Cotton Dolly," belongs to a class of so-called "popular music," and that the popularity or salability of perforated rolls for said "Little Cotton Dolly" is not above the average of all pieces of that class.

This affiant says that very few pieces of music of that class continue to be in demand or salable to any considerable extent longer than one or two years, and that the average life or period of salability of perforated rolls for such music for any one locality seldom exceeds a single season or period of six months; that inquiries for and sales of such rolls after the first six months from their introduction, except in case of a few of rare and exceptional merit and popularity, are only occasional; that such pieces frequently acquire popularity in a given locality, as on the Atlantic Coast, several months before they become known at all in more remote localities, so that a piece whose popularity has practically ceased at New York City may be acquiring its first popularity at San Francisco, and that the average period of salability of such pieces from the time of their earliest popularity at the locality where they are first introduced in the United States to the end of the period of profitable salability at the locality where they are last introduced in the United States does not ordinarily exceed one year.

This affiant further says that the average total number of

ited period of salability of a large percentage of perforated rolls for the music carried in stock and in catalogue, it is necessary, in order to maintain the volume of business without diminution from month to month and from year to year, to contiually add new pieces to the catalogue and stock; that the total amount of such pieces necessary in order merely to maintain the business at its present volume without increase is about one thousand (1,000) pieces per annum, and that since this number of additions would merely offset the number of pieces during the same period becoming dead or unsalable, if it were necessary to pay Ten Dollars ($10) for the right or privilege of making perforated rolls for each of these additional pieces the amount thus required—Ten Thousand Dollars ($10,000) per annum—would be substantially of the nature of expense to be charged against the gross profits of the business; and this affiant says that such a charge alone, without the interest charge above mentioned, would be absolutely prohibitive, because it would exceed the entire profits, and would compel the suspension of said business.

From this method of calculation as to the maximum possible value of a piece of average popularity and salability, such as "Little Cotton Dolly," this affiant is clearly and positively of the opinion that such right or privilege would not be worth to exceed the sum of Five Dollars ($5) to the Q. R. S. Company, and that it is very doubtful whether said company could continue in business if even that low basis of valuation were applied to all the pieces for which it makes perforated rolls and corresponding prices exacted for such privilege

This affiant further says that the value of said right or privilege to the Apollo Company of New York is, and at all times since the commencement of this suit has been, altogether nominal and not to exceed One Dollar ($1).

This affiant further says that he has just completed a careful examination of the records of cuttings of perforated rolls

of "Popular" music of the Q. R. S. Company with respect to the number of rolls cut of the most popular and salable pieces, and he finds that the total number of rolls cut for any piece of "Popular" music in the entire business of the Q. R. S. Company has not exceeded five hundred (500) rolls, with one single exception, and in the case of that single exception the total number of rolls cut was one thousand one hundred eighty (1,180), the piece having a popular run from December, 1902, to about one year ago—that is to say, nearly four years—and that the average number of rolls cut of the five best selling pieces, excluding the one above mentioned, is three hundred forty-three (343) rolls, of which the average number on hand is twenty-three (23), and of which the average number sold and otherwise disposed of is three hundred twenty (320).

Further affiant saith not.

E. G. CLARK.

Subscribed and sworn to before me this 7th day of September, 1907.

JOHN T. BOWLES,
Notary Public.

[SEAL.]

hand ten (10) "Little Cotton Dolly" rolls, and nine (9) "Kentucky Babe Schottische" rolls, and that none of them are kept with stock for sale, said rolls being now regarded as wholly unsalable.

Further affiant saith not.

FRED KANN.

Subscribed and sworn to before me this 30th day of September, 1907.

ROBERT R. GREASON,
Notary Public, N. Y. Co.,
Reg. Office 2747.

[SEAL.]

Supreme Court of the United States

OCTOBER TERM, A. D. 1907.

WHITE-SMITH MUSIC PUBLISHING CO.,
Complainant-Petitioner,
vs.
APOLLO COMPANY,
Defendant-Respondent.

No. 110, on Appeal
Petition for Certiorari

BRIEF IN RESPONSE TO PETITION FOR CERTIORARI.

To the Honorable Chief Justice and Associate Justices of the Supreme Court:

In so far as this petition for certiorari is urged on the ground of the "general importance of the questions" raised in the case, the considerations bearing thereon being addressed to the unrestricted discretion of the court, and the facts relied upon by the petitioner to support the claim of such "general importance" being stated with substantial correctness in the petition, it is not deemed necessary to present any argument for influencing the court's discretion as affected by these considerations. But the following counter-considerations may properly be weighed:

1. The whole case turns upon the construction of the copyright statute, and upon the conclusion which may be reached as to whether or not the word "copy" of the

statute is properly to be construed as including devices for automatically rendering audible musical compositions for which copyright has been obtained by filing the customary staff notation thereof.

Since the decision in this case in the Circuit Court of Appeals it has become manifest by the action of the Committees on Patents, of the Senate and House of Representatives (within whose province copyright matters lie) that Congress will probably shortly enact legislation determining definitely for or against the inclusion of these automatic devices within the protection of copyright on the musical compositions.

In the last Congress, Senate Bill No. 8190 reported (by a majority of one) from the Senate Committees on Patents, provides expressly for including automatic sound-producing devices within the protection of copyright on musical compositions. A minority report of the same Senate Committee vehemently attacks this provision and recommends the adoption of an expressly contrary provision, to-wit, affirmatively excluding such devices from the scope of copyright protection.

House Bill No. 25133 reported from the House Committee on Patents, contains express provisions excluding automatic sound-reproducing devices from the scope of copyright protection.

Bills substantially the same in the respects mentioned have been introduced in the present Congress. (Senate Bill No. 2499 and House Bill No. 243, expressly excluding automatic sound-reproducing devices from copyright protection, and Senate Bill No. 2900 expressly including such devices.) And it is probable that within the life of the present Congress, and possibly before the decision of this court in the present case,—if it should be considered

on the merits,—will be promulgated, one or the other of these two bills will have been enacted into a law; and thereby, whatever ought to have been or may be the interpretation of the present statute in this respect, the law in future will be absolutely free from uncertainty, and all concerned will take notice of and be governed by the express provisions of such new act in dealing with musical compositions and perforated rolls.

Thereafter the interpretation of the present statute will be commercially unimportant, except as affecting existing copyrights.

Substantially the only copyrighted music for which the making of perforated rolls for automatic players is of pecuniary consequence, either to the makers of such rolls or to the copyright owners (if the latter have any rights in respect thereto), are of the class so-called "popular music" (classic music being free from copyrights, and sacred music not being to any considerable extent played by automatic instruments).

As shown by the affidavits in support of the motion to dismiss, the commercial life of the perforated rolls for this copyrighted music rarely exceeds six months.

For there would be no motive for seeking *injunction* in respect to a piece of music already dead as to marketability of the perforated rolls for playing it. And as to *damages*, no manufacturer of these rolls has ever sold enough of any particular roll to make the total profits equal the cost which would be incurred by a complainant in bringing suit (a separate suit being necessary on each particular piece against each particular manufacturer).

It follows, therefore, within less than one year after new legislation shall have solved the uncertainty as to the inclusion or non-inclusion of automatic devices within

copyright protection, whichever way it shall be solved, no considerable commercial importance will attach to the decision of any of the questions involved in this case.

It would, therefore, be scarcely less a work of supererogation on the part of the court now to consider these cases on their merits for determining the questions vital thereto, than if they had been brought after the enactment of a new statute definitely determining for the future the questions which they raise as to the past.

So far as the importance of the decision of this court might rest upon the determination of the constitutional question which, as noted in the petitioner's brief, is presented by the brief of Mr. Albert H. Walker, filed by leave granted him as *amicus curiae*, it is suggested that this court should not take jurisdiction by virtue of the mere possibility of the arising of a question brought in by a third party, not contested by the actual parties, and not, in fact, in controversy between them.

The constitutional point raised by Mr. Walker is that the statute, if construed in accordance with the complainant's contentions, would be unconstitutional. The defendant-appellee, however, has never taken this position. True, it would be possible for this court to consider that question if the conclusion should first be reached that the statute ought to be construed in accordance with the complainant's contention, but that question does not arise upon this record except as brought into it by the intervening petition of Mr. Walker's client and by Mr. Walker's brief as *amicus curiae* in this court. It is not in issue between the parties in litigation and has never been. It should not, therefore, be considered ground for taking jurisdiction of the actual controversy between these par-

ties, which is in respect to the meaning of the *statute*, and not in respect to the meaning of the *constitution*.

Upon the point suggested by the petitioner in its brief in opposition to the Motion to Dismiss, to wit, that the delay in taking appeal is the cause of the lateness of the petition for certiorari, and that such lateness should not therefore enter into consideration as a ground for denying the petition, the respondent makes the following suggestions based upon the record:

1. The cost of printing the record in this case, amounting to over $1400, was a sufficient amount to bear materially upon the question of the expediency of prosecuting the appeal, and might have been a determining consideration. Until, therefore, the appellant gave instructions for the printing of the record, it was altogether uncertain whether the appeal would be prosecuted.

Furthermore, in the interval following the rendering of the decision in the Court of Appeals adverse to the complainant, at which it became necessary for complainant to indicate its decision relative to printing the record, it was apparent that the parties interested on behalf of the complainant-appellant were putting forth strenuous and apparently very expensive efforts to procure legislation which would make it altogether unimportant to prosecute the appeal. (See records of proceedings of Congressional Committee on Patents, referred to by petitioner.) These acts on the part of the appellant seemed to indicate clearly the abandonment of the judicial for the legislative field, and pointed to the opinion that the appeal would not be prosecuted. This statute continued until after the close of the October, 1906, term of this court and well on into the vacation, for the complainant-

appellant did not request the clerk to proceed with the printing of the record until , 1907.

The Motion to Dismiss could not have been presented to this court without the presence of the entire printed record, unless by virtue of stipulation between the parties accompanying a portion of the record that such portion contained all matters relevant to the Motion. As a matter of fact, the entire record was, in a sense, relevant to the Motion, because, for the purposes of the Motion, it was necessary that it should appear that the record did not contain any evidence of the value of the matter in controversy; and without stipulation this negative proposition could only be established by the production of the entire record. It is wholly improbable that the necessary stipulation could have been obtained from the complainant-appellant if it had been sought by the appellee, but it is admitted that the appellee made no attempt to obtain such stipulation until after it was ascertained that the appellant had decided to prosecute the appeal as indicated by giving directions for printing the record. And then proposition for postponing the printing of all but a small portion of the record until the Motion to Dismiss could be considered upon such small portion was not favorably received by the appellant.

The earliest date at which the Motion could be submitted was, obviously, the first Monday of the October, 1907, term; and Motion papers were served for a week later expressly for the purpose of allowing the appellant one week more for preparing counter affidavits. The delay of this single week will certainly not be considered material to the ground urged for granting writ of certiorari.

It does not seem that the appellee should be held negligible or dilatory because it did not incur the expense of $1400 for printing the record for the sake of being able to present the Motion to Dismiss at a preceding term, while the appellant was delaying to print, and thereby apparently delaying to decide upon the prosecution of the appeal. For it is obvious that by advancing the cost of printing the record the appellee might have been promoting the prosecution of the appeal against itself, which would otherwise have been allowed to go by default for lack of printed record.

Respectfully submitted,

CHAS. S. BURTON,

Of Counsel for Respondent.